



L. G. L. L.
1879-80

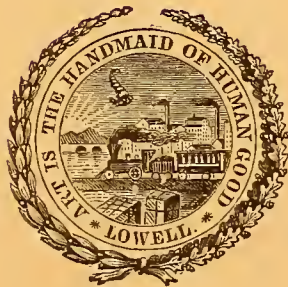
CITY DOCUMENTS

OF THE

CITY OF LOWELL

FOR THE YEAR

1879-'80.



LOWELL, MASS.:

VOX POPULI PRESS: HUSE, GOODWIN & CO.

1880.

EXTRACT FROM THE ORDINANCES OF LOWELL.

CHAPTER V.—CITY DOCUMENTS.

SECTION 1. All City Documents (except the rules and regulations for the government of the police and fire departments) shall be printed in pamphlet form of the size of the Annual Report of the School Committee.

SECT. 2. All City Documents shall annually be bound together in one volume, under the direction of the City Clerk; and three or more copies shall be deposited in the city library, and one copy in the library of the Middlesex Mechanics' Association. One copy shall be sent to each city of the Commonwealth, to the library of Harvard College, the public library of Boston, the State library, and the Smithsonian Institution at Washington.

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1. Inaugural Address of His Honor FREDERIC T. GREENHALGE, Mayor of the City of Lowell, to the two branches of the City Council, January 5, 1880.
2. Municipal Register, containing Rules and Orders of the City Council, and a list of the Government and Officers of the City of Lowell for 1880.
3. Fifty-fourth Annual Report of the School Committee of the City of Lowell, together with the Sixteenth Annual Report of the Superintendent of Public Schools, 1879.
4. The Auditor's Forty-fourth Annual Report of the Receipts and Expenditures of the City of Lowell, together with the Treasurer's Account, for the Financial Year ending December 31, 1879.
5. Annual Report of the Directors of the City Library, for the year 1879. ✓
6. Annual Report of the Board of Health, for the year 1879.
7. Annual Report of the City Physician and Superintendent of Burials of the City of Lowell, for the year 1879.
8. Annual Report of Births, Marriages, and Deaths in the City of Lowell, during the year 1879.
9. Annual Report of the Chief Engineer of the Fire Department, for the year ending March 31, 1880.
10. Seventh Annual Report of the Water Board of the City of Lowell to the City Council, accompanied by the Reports of the City Engineer and of the Superintendent of Water Works to the Board, January 1, 1880.
11. Annual Report of the City Marshal, for the year 1879.
12. Annual Report of the City Solicitor, for the year ending Feb. 29, 1880.
13. Fifty-fourth Report of the Overseers of the Poor of the City of Lowell.
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17. Annual Report of the Superintendent of City Scales and Measurer of Wood and Bark, for the year 1879.
18. Annual Report of the Sealer of Weights and Measures, for the year 1879.
19. Salaries of the Officers of the City of Lowell, for the year 1880.



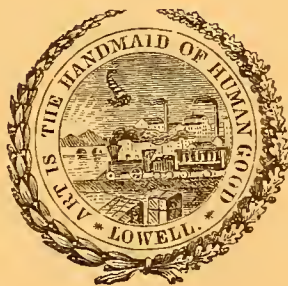
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THE
INAUGURAL ADDRESS
OF HIS HONOR
Frederick T. Greenhalge,

MAYOR OF THE CITY OF LOWELL,

TO THE
TWO BRANCHES OF THE CITY GOVERNMENT,

January 5, 1880.



LOWELL, MASS.:
MARDEN & ROWELL, BOOK AND JOB PRINTERS.
1880.

CITY OF LOWELL.

IN COMMON COUNCIL, January 5, 1880.

ORDERED, If the Board of Aldermen concur, That His Honor the Mayor be requested to furnish a copy of his Address for publication.

IN COMMON COUNCIL, January 5, 1880.

Read and adopted; sent up for concurrence.

DAVID CHASE, *Clerk.*

IN BOARD OF ALDERMEN, January 5, 1880.

Read and adopted in concurrence.

SAMUEL A. MCPHETRES, *City Clerk.*

ADDRESS.

GENTLEMEN OF THE CITY COUNCIL:—

We have come here to-day to take charge of the municipal business of Lowell. I may say to you—as upon you will devolve the chief part of the work—that you are bound to transact that business with at least as much care and consideration, and upon precisely the same principles, as you would transact your own most important private business. We are not sent here by our fellow citizens to reward friends, or to punish opponents; nor are we, in the appointment of city officials, to consider ourselves as almoners of the city, whose chief object is to furnish employment to needy persons. Neither do we come here as partisans, to further the interests of any political party. Efficiency and character are the only tests to be applied to appointments, and a fearless fidelity to the highest interest of the whole city the only principle by which your official conduct should be tried. That man among you who shall square his conduct, not by these principles, but by some theory of future political preferment, betrays the trust reposed in him by his fellow

citizens, and violates the solemn obligation he has just taken.

In order to meet the approbation—I may say, indeed, the expectation—of your fellow citizens, your administration must be marked by a strict regard for the rights of all classes and all sections, and by an impartial and fearless execution of the laws. Above all, a spirit of judicious economy must be exhibited in every municipal act. By economy, I do not mean parsimony. As with everything else, a good government commands a good price, and the best is the cheapest. But before making any expenditure, you must be satisfied that the public good really requires it, and then be sure that for every dollar of the public money there shall be a proportionate return of public benefit.

You are, as it were, directors of a corporation with a capital of \$40,000,000, that being about the valuation of the property in our city. There is a debt of \$2,281,000 outstanding against the corporation, the greater portion thereof being incurred on account of an excellent system of water works, and to reduce this debt is a sinking fund amounting to about \$225,000. Every year we are called upon to expend from a half to three-quarters of a million of dollars for the ordinary running expenses of the city.

It may be well to consider how this large amount of money is expended. The largest appropriation is for the support of our

PUBLIC SCHOOLS.

Massachusetts is the birth-place of the public school system, and it is only natural and fitting that

within her borders this system should be most carefully cherished.

Without popular education, popular government is a failure. Education is the key-stone in the "wide arch of our ranged union." It is at once the ornament and the bulwark of our freedom.

In monarchical countries the most extraordinary care is taken with the education of the youthful princes who are soon to wield the sceptre. The preservation of our republic requires that we spare no effort to train up its future rulers. The instruction of our youth gives us a security and peace beyond anything that law or police can give. These are but the external armor of the body politic. Education is its very breath of life.

Six thousand five hundred and thirty-nine children are to-day sharing the benefits of our city schools. Every time the morning school bell rings, this little army begins another day's march in knowledge and understanding. The average attendance in our schools is nearly six thousand. Within the past year there has been an increase of three hundred and ninety-four in the number of pupils. We have a corps of one hundred and forty-nine regular teachers, who have charge of eighty schools. Forty-one buildings are required for the work of these schools.

By the adoption of a policy, the justice or wisdom of which I fail to perceive, and which certainly does not meet with the approbation of the teachers, the high school has been crowded to an extent which threatens to impair the efficiency and to lower the

previous high standard of the institution. A different line of action must be taken in order to allow the successful working of the excellent educational machinery furnished by the city, and to enable pupils to obtain the full value of the opportunities here offered. The total expenditure for our public schools last year was \$125,429.68.

SEWERS AND DRAINS.

A system of sewerage has been necessitated by the construction of the water works. The expense of building sewers for the last ten years amounts to \$582,511.35, and for anything I can see, there will be little or no diminution of expenditure in this direction for the next five or six years. It is a matter which cannot be shirked, or attended to in any imperfect way. The health and comfort of our people depend upon careful and scientific sewerage. Last year, \$66,819.82 was expended in this department.

WATER WORKS.

Our system of water works is extensive and valuable. Year by year the range of their influence is widened. The introduction of meters has tended to diminish the income from customers but the general benefit to the whole city derived from the facilities here so cheaply afforded, will, I think, compensate for any apparent loss of profits. The question is simply whether the water rates shall be increased, thus lessening the taxes upon private property, or whether the water rates shall be low, and the rate of taxation be

in consequence a little higher. I do not see that in the end there would be anything gained by a change as the burden in either case would be borne by the same classes as now. The net expenditure in this department last year, was \$39,862.48.

CITY LIBRARY.

I think a change in the mode of electing a librarian might be expedient. The directors of the library, from the nature of their position, would be best fitted to make the appointment.

What is needed now is a thorough and systematic classification of the books in the library. Worthless literature should be weeded out. A new catalogue is, I believe, in contemplation and its preparation, according to the best methods now in use, is a labor calling for more than ordinary judgment and experience. The total expenditure for the library, the past year, has been \$4507.26; the net expenditure, however, being only \$1319.62.

LICENSE LAW.

The execution of the law regulating the sale of intoxicating liquors will demand our utmost care, judgment, and courage. We are the servants of the law. We did not make it. We are here only to administer it, and to administer it fearlessly and conscientiously. Last year three hundred and sixty licenses were granted; that is, at the rate of one license to every hundred and fifty persons—men, women, and children. The mayor and aldermen are at liberty to exercise the

functions of license commissioners themselves or the city council may decide to give the matter into the charge of three persons chosen from our fellow citizens, who will perform the duties for such compensation as the city council may fix. The expediency of appointing these commissioners is a question well worthy of your serious consideration. My immediate predecessor recommended this course, but it was not adopted. I cannot forbear remarking that the duties of carrying out the provisions of the law strictly and faithfully will be a heavy burden upon the time of the mayor and aldermen, but one which, if left to them they will not shrink from.

FIRE DEPARTMENT.

I think it will be conceded on all hands that our fire department is in a high state of efficiency. Men, material and equipments are marked by unusual excellence. Certainly the city has spared no expense to bring about this result; and while members of the force would themselves deprecate the expenditure of money for idle ornament and display, they fully understand that our citizens are always ready to make any outlay which will contribute to the efficiency of the force.

Good luck and the excellence of the fire department have hitherto combined to protect us from any great conflagration. But with the increase in the number of lofty buildings in the city, a source of danger has arisen which we must be prepared to meet. If we were to be visited by a fire of ten or twelve hours'

duration, our present force would not be able to cope with the emergency. I would suggest, then, that a reserve corps, composed of veteran firemen, should be organized, and be ready for action whenever the ordinary force may require their assistance. I think that fifty or a hundred experienced men could be found who would be willing to serve as a reserve fire brigade for an honorary compensation.

We have now in good order—Steam fire engines, 3; horse hose carriages, 7; hand hose carriages, 2; hook and ladder trucks, 2; also 7 horse hose sleighs. The cost of our fire department, for the year 1879, was \$65,198.12.

POLICE.

We have expended in the police department the sum of \$49,436.43. The police force of the city has generally been of a high character. In order to maintain this character, it is necessary that in making appointments to the force, intelligence, steadiness, and physical capacity, should be regarded as indispensable qualifications. The spirit of discipline and devotion to duty must be fostered. We cannot afford to keep men on the force, who, when the fire alarm sounds close at hand, coolly march off to lunch, as if that were the chief end and aim of existence. Loyalty and obedience, too, are necessary. We do not want men whose object is rather to demonstrate that this or that line of policy is a failure, than to do their whole duty with single-hearted and loyal purpose, leaving the result with those to whom the responsibility justly belongs.

The city marshal recommends that the distinction between the day officers of the force and those of the night force be abolished; and that night or day work be performed in turn by all the members of the force. This is a matter of detail, and the expediency of the change can be determined by the committee on police. One word in reference to the management of this important department. While a careful supervision must be maintained by this body or its representatives over every branch of the department, I think the less interference there is with its internal workings, except through the legitimate channels, the better it will be for the efficiency of the force. If you have a responsible and capable officer in charge, give effect to his recommendations, and let him have full scope and power within the proper limits of his position. If the department does not show satisfactory results, you know then just where to fix the responsibility. Divided authority does away with discipline and begets insubordination. The officer should not be embarrassed or interfered with in the plans and purposes he has formed; he should feel that he is in full command.

If these plans and purposes do not, in your judgment, promote the efficiency of the force and tend to secure the peace, security, and good order of the city, then a more capable man must be placed in this responsible position.

STREETS.

During the last year, nineteen new streets have been laid out and accepted, and thirty-six sidewalks built. Liberty square, Gorham, Market, Branch, East Mer-

rimack, Bridge and River streets have been paved. This work required the laying of nearly twelve thousand yards of paving. It will be necessary to repave Shattuck street, and Bridge street from Sixth to Ninth street. These are now paved with the Morong wood paving, and are in very bad condition. Central street, from Jackson to Union street, and from Market to Merrimack street, and Merrimack street, from Central street to the Boston & Lowell railroad depot, are now paved with the old-fashioned broad paving stone, and should be repaved with the narrow blocks of the modern pattern.

Some mistaken notions prevail as to the amount of work performed by the department in the various sections of the city. The following table will show just what labor and material have been expended in each of the six wards from 1873 to 1879:

Cost of Labor and Material:

| | | | | | |
|---------|---|---|---|---|--------------|
| Ward 1, | - | - | - | - | \$56,845.83. |
| Ward 2, | - | - | - | - | 53,658.47. |
| Ward 3, | - | - | - | - | 97,017.60. |
| Ward 4, | - | - | - | - | 55,614.05. |
| Ward 5, | - | - | - | - | 69,575.85. |
| Ward 6, | - | - | - | - | 64,747.64. |

Within the past year, however, the wards embracing the older portions of the city have not required so much outlay as formerly, while the wards containing the newly settled districts have naturally and inevitably required more. This is not to be wondered at; the only question to be considered by you is whether the

public necessity and convenience demand a certain expenditure. If you decide affirmatively, the locality to be benefited by the outlay is a matter of no consequence.

NEW CITY HALL BUILDING SITE.

The question as to purchasing land for a new city hall, which has agitated the city for the past year, has been finally settled, and the city council, backed by a strong popular vote, has decided to purchase the land of the Merrimack Manufacturing Company, lying westerly of Monument square.

I trust that when the time comes for erecting the city hall, we may obtain a structure which will be a credit to our city, not only as regards the beauty of its proportions and its convenience, but also for the careful economy manifest in every detail of its construction.

SALARIES AND OFFICES.

I think the time chosen for fixing salaries is objectionable. You elect most of the city officials in January. Their compensation is fixed some three months afterward. Here is a chance for confusion and litigation. The municipal year as regards tenure of office is from January to January; the year as to salaries is from April to April. It might be claimed that an official would be entitled to the actual value of his services for the interval between his election and the time of fixing his salary; or, if there happened to be a considerable reduction of salary, he might claim compensation at the old rate.

There are one or two offices that should be either abolished or treated in a serious manner. I consider the duty of the inspector of milk one which concerns deeply the welfare of all of us, particularly those who have young children. Provision should be made to insure a thorough and scientific analysis of the milk brought into our city, and the inspector should understand that his duties are not nominal. The offices of pound-keeper and field-driver would seem to be obsolete, and I would suggest that you consider the expediency of abolishing the salary attached thereto.

FINANCIAL STATEMENT.

Let us look at the financial condition of the city. In the last ten years, the largest balance in the treasury at the incoming of a city government, after allowing for the December draft of the preceding year, was \$284,776.92; the smallest was \$40,996.37. This year, gentlemen, we begin our municipal work with a balance of \$11,773.38. Before we are warm in our seats we shall be compelled to borrow. It is, however, very fortunate that the credit of our city is good—so good, that I think our notes at the rate of 4 1-2 per cent. per annum would command a premium. Still, the state of the finances should deter us all from any unnecessary expenditure of the public money.

I append hereto the usual exhibit from the account of the auditor of the city, where can be found the exact figures of the sums, which, in some cases, I have given in round numbers. The reports of other officials will give more particular statements of the condition of each department.

FINANCIAL.

| | |
|--|---------------------------|
| The balance in the treasury January 1, 1879, was | \$74,574 91 |
| The amount received into the treasury during the year was | 1,061,166 45 |
| Total, | <u>\$1,135,741 36</u> |
| The amount paid from the treasury during the year was | 1,091,030 92 |
| The balance in the treasury Dec. 31, 1879, was | <u>\$44,710 44</u> |
| The amount of the city debt January 1, 1879, was | \$2,303,500 00 |
| There has been paid during the year on account of the city debt, | 22,500 00 |
| Total debt of the city, Dec. 31, 1879, | <u>\$2,281,000 00</u> |
| The ordinary debt of the city, Dec. 31, 1879, was | \$481,000 00 |
| The city debt on account of water works, Dec. 31, 1879, was | <u>1,800,000 00</u> |
| Total debt of the city, Dec. 31, 1879, | \$2,281,000 00 |
| The amount of the water loan sinking fund, Dec. 31, 1879, was | \$213,988 55 |
| The amount of the sinking fund for the reduction of the loan of 1876, Dec. 31, 1879, was | 12,737 37 226,725 92 |
| Total net debt of the city, Dec. 31, 1879, | <u>\$2,054,274 08</u> |
| The net debt of the city (ordinary), Dec. 31, 1879, was | \$481,000 00 |
| The net debt of the city on account of water works, Dec. 31, 1879, was | 1,573,274 08 |
| Total city debt, as above, | <u>\$2,054,274 08</u> |

APPROPRIATIONS, EXPENDITURES AND BALANCES
FOR 1879.

| | APPROPRIATIONS. | EXPENDITURES. | BALANCES. |
|--|---------------------|---------------------|--------------------|
| Schools, | \$128,010 32 | \$125,429 68 | \$2,580 64 |
| School Houses, | 23,603 51 | 17,608 74 | 5,994 77 |
| Roads and Bridges, | 103,403 32 | 103,291 65 | 111 67 |
| Reserved Fund, | 46,971 49 | *45,398 94 | 1,572 55 |
| Paupers, | 47,794 68 | 46,461 43 | 1,333 25 |
| Police, | 50,562 84 | 49,436 43 | 1,126 41 |
| Fire Department, | 66,593 27 | 65,198 12 | 1,395 15 |
| Sewers and Drains, | 67,295 95 | 66,819 82 | 476 13 |
| Commons, | 2,757 87 | 2,403 51 | 354 36 |
| Printing and Advertising, | 2,981 96 | 2,703 86 | 278 10 |
| Lighting Streets and Public Buildings, | 19,322 04 | 17,001 67 | 2,320 37 |
| Repairs of Public Buildings, | 8,850 02 | 6,953 33 | 1,896 69 |
| <i>Amount carried forward</i> | <u>\$568,147 27</u> | <u>\$548,707 18</u> | <u>\$19,440 09</u> |

*Of this amount, \$25,000 was transferred to sundry appropriations.

| | | | |
|--|-----------------------|-----------------------|--------------------|
| <i>Amount brought forward</i> | \$568,147 27 | \$548,707 18 | \$19,440 09 |
| City Library, | 4,783 00 | 4,507 26 | 275 74 |
| Salaries, | 17,871 96 | 16,833 75 | 1,038 21 |
| Health, | 2,862 52 | 2,772 21 | 90 31 |
| Water Works, | 150,390 21 | 150,047 82 | 342 39 |
| State Aid for Poor and Indigent Soldiers and Sailors (Laws of 1878), | 1,337 31 | 1,337 31 | |
| Aid for Poor and Indigent Soldiers and Sailors (Laws of 1879), | 8,737 81 | 4,475 25 | 4,262 56 |
| State Aid (Laws of 1879), | 7,000 00 | †5,975 75 | 1,024 25 |
| City Debt, | 22,500 00 | 22,500 00 | |
| Interest on City Debt, | 39,116 42 | ††34,519 87 | 4,596 55 |
| Corporation Tax, | 45,155 82 | ‡29,155 82 | 16,000 00 |
| National Bank Tax, | 24,841 11 | ‡‡24,841 11 | |
| State Tax, | 10,550 00 | 10,550 00 | |
| County Tax, | 15,241 83 | 15,241 83 | |
| Abatement of Taxes, | 19,236 46 | 5,215 01 | 14,021 45 |
| Water Loan Sinking Fund, | 25,000 00 | 25,000 00 | |
| Sinking Fund for Loan of 1876, | 4,000 00 | 4,000 00 | |
| Temporary Loan. | 250,000 00 | 250,000 00 | |
| Carney Medal Fund, | 200 00 | | 200 00 |
| | <u>\$1,216,971 72</u> | <u>\$1,155,680 17</u> | <u>\$61,291 55</u> |
| Due from Commonwealth on account of State Aid, | | \$14,044 57 | |
| Due on account of Taxes of 1878, | | 3,091 10 | |
| Due on account of Taxes of 1879, | | 32,382 48 | |
| Balance in Treasury, less December Draft, unpaid, | | 11,773 40 | |
| | | <u>\$61,291 55</u> | <u>\$61,291 55</u> |

†Of this amount, \$700 was transferred to "Aid for Poor and Indigent Soldiers and Sailors."

††Of this amount, \$1500 was transferred to the appropriation for city debt.

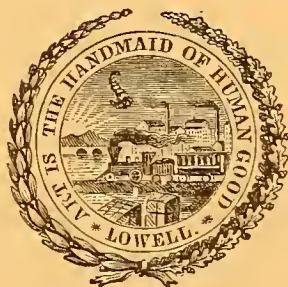
‡This amount was transferred to sundry appropriations.

‡‡Of this amount, \$8,888.81 was transferred to sundry appropriations.

GENTLEMEN: Such, in brief, is the statement of municipal affairs as we find them. On the whole, we enter upon our municipal labors under fair auspices. After many years of trial and adversity, we see the dawn of a better day. Our city, indeed, has suffered as little from business depression as any in the State; and prosperity, flying like the dove from the ark, first found a footing here. Our coming here does not mean the proscription of any class of our fellow citizens. If we may not win enthusiastic praise, at least let it be said of us that, during our administration, no man was abridged of his rights, and no harm came to the city which we might have averted.

MUNICIPAL REGISTER:
CONTAINING
RULES AND ORDERS
OF THE
CITY COUNCIL,
AND A LIST OF
THE GOVERNMENT AND OFFICERS OF THE CITY OF LOWELL.

1880.



LOWELL, MASS.:
VOX POPULI PRESS: HUSE, GOODWIN & CO.
1880.

JOINT RULES AND ORDERS OF THE CITY COUNCIL.

1. In the month of January joint standing committees shall be appointed as follows:

- A COMMITTEE ON ACCOUNTS.
- A COMMITTEE ON CLAIMS.
- A COMMITTEE ON EDUCATION.
- A COMMITTEE ON FINANCE.
- A COMMITTEE ON THE FIRE DEPARTMENT.
- A COMMITTEE ON LANDS AND BUILDINGS.
- A COMMITTEE ON MILITARY AFFAIRS.
- A COMMITTEE ON PRINTING.
- A COMMITTEE ON STREETS.

Each committee shall consist of two Aldermen and three members of the Common Council, except the Committee on Streets, which shall consist of two Aldermen and five members of the Common Council.

2. Each board shall, in such manner as it may determine, select its own members for any joint committee.

3. In all joint standing committees, except that on Finance, the member first named in the Board of Aldermen shall be chairman; of the Committee on Finance, the member first named in the Common Council shall be chairman; and in all joint special committees, the member first named in the board where the business originates, shall be chairman, and shall call the committee together.

4. The reports of all committees, signed by a majority of the members, shall be made to the board in which the business referred originated.

5. No committee shall act by separate consultation, and no report shall be received unless agreed to in committee actually assembled.

6. It shall be the duty of every joint committee (the Committee on Streets excepted) to whom any subject may be specially referred, to report thereon within five weeks, or ask for further time.

7. The by-laws of the city shall be termed Ordinances; the enacting clause of which shall be—"Be it ordained by the City Council of the City of Lowell, as follows."

8. An ordinance may originate in either board, and shall be considered in three several stages. It shall first be read for information, and the question shall then be on ordering it to a second reading, but if it has not previously been in the hands of some joint committee it shall first be so referred. When reported back, the recommendations of the committee shall first be acted on. If it shall then be ordered to a second reading, it shall next be examined by a standing committee of that board, who shall see that it is drawn in proper form. When returned by such committee, the question shall be on ordering it to be enrolled. If so ordered, it shall then be sent to the other board, where the same order of proceeding shall be observed. When it has been ordered by both branches to be enrolled, it shall be enrolled by the Clerk of the Common Council, and shall be by him submitted to the proper committee of that board, to ascertain if it has been correctly enrolled. If so reported, the question shall be on passing it to be ordained. If it shall so pass, it shall be signed by the President of the Common Council and be sent to the Board of Aldermen, where it shall take a like course. If passed to be ordained in that board, it shall be signed by the Chairman of the Board of Aldermen, and be sent to the Mayor for his approval.

9. Every joint resolution shall be read in the board in which it is introduced, and the question shall be upon ordering it to a second reading. If so ordered, the question shall then be upon its passage. If passed, it shall be sent to the other board, where the order of proceeding shall be the same. When passed by both boards, the resolution shall be enrolled by the Clerk of the Common Council, and when found correctly enrolled as provided in the case of an ordinance, it shall be signed by the President

of the Common Council and the Chairman of the Board of Aldermen, and be sent to the Mayor for his approval.

10. Joint orders shall require but one reading, and when adopted shall be sent to the Mayor for his approval, except when they relate to a question of a convention of the two branches, or the election of any officer.

11. An ordinance may be rejected in any stage, but may not pass through all its stages in the same day.

12. Every appropriation of money exceeding fifty dollars, shall be by resolution.

13. Each board shall transmit to the other all papers on which any ordinance, joint resolution, or order, shall be founded; and all papers on their passage between the two boards shall be under the signature of their respective clerks, except ordinances and joint resolutions in their last stage, which shall be signed by the presiding officers. If papers come before either board which have been duly acted upon in either board, the presiding officer shall so state without reading the endorsements of the clerk, unless the latter are called for.

14. All enrolled ordinances shall be written in a fair and compact hand, without interlineations or erasures, and no enrolled ordinance or resolution shall be amended.

15. When either board does not concur with the other in any ordinance or resolution sent from the other, notice of such non-concurrence shall be given by a written message.

16. In any case of non-concurrence, each board may appoint a Committee of Conference. Such committee shall consist, in each case, of three members who support the vote of their own board. These two committees may meet jointly or separately, and a majority of each shall decide its action.

17. No committee shall enter into any contract with any of its members, or purchase, or authorize the purchase of, any article therefrom.

18. No chairman of any committee shall audit or approve any bill or account against the city, for any supplies or services which shall not have been ordered or authorized by the committee.

19. All reports and other papers submitted to the City Council shall be written in a fair hand, without endorsement,

except in case of the introduction of an order. In such case the member introducing an order shall subscribe his name at the bottom of the back of the order. All other endorsements upon the back of papers shall be made by the clerks, and the clerks of the boards respectively shall, on seasonable notice, make copies of any papers to be reported by committees, at the request of the respective chairmen thereof.

20. No business shall be transacted by the City Council in Convention, except such as shall have been previously agreed on, unless by unanimous consent.

21. After the annual appropriations shall have been passed, no subsequent expenditure shall be authorized for any object, unless provision for the same shall be made by a specific transfer from some of the appropriations contained in the annual resolution, or by expressly creating therefor a city debt; but no such debt shall be created unless the resolution authorizing the same pass by the affirmative votes of two thirds of the whole number of each branch of the City Council, said votes to be taken by yeas and nays, excepting in case of appropriations for the providing of armories for the use of military companies, for the celebration of holidays, and for other purposes of a public nature, when a vote of two thirds of the members of each branch of the City Council present and voting shall be sufficient, but the amount of such appropriations named in this clause shall not exceed one fiftieth part of one per cent. of the valuation of the city for the same year.

22. In ballotings in joint Convention, blanks shall not be counted.

23. Either board may propose to the other a time to which both will adjourn; and neither shall adjourn without giving notice to the other of its intention.

24. These rules may be suspended for a specific purpose, or amended, whenever twenty-two members of a joint Convention of the two branches shall so direct, or whenever a joint order to that effect shall be passed by the votes of six members of the Board of Aldermen and sixteen members of the Common Council.

RULES AND ORDERS OF THE BOARD OF ALDERMEN.

1. At the appointed time the presiding officer shall take the chair, and on the appearance of a quorum, proceed to business.

2. The order of business shall be as follows :

First—Reading the journal, if it be a regular meeting, of the last regular meeting and all subsequent special meetings.

Second—Petitions and similar papers.

Third—Appointments, elections, etc.

Fourth—New business, which unless otherwise ordered will take its place at the foot of the Orders of the Day.

Fifth—Orders of the Day, consisting of unfinished business of the last previous meeting, papers from the Common Council, and such matters as have been introduced as new business. By a vote of six members, any matters in the Orders of the Day may at any time be taken up for immediate consideration.

3. The presiding officer shall decide all points of order, subject to appeal. He may read while sitting, but must rise to put a question. He shall allow debate on a question until the vote has been declared, but not on the verification of a vote; and on the demand of two members shall take every vote by yeas and nays.

4. When a question is under debate, the presiding officer shall receive no motion but to adjourn, to take up a special assignment, to lay on the table, to postpone to a day certain, to commit, to amend, or to postpone indefinitely. These several motions shall have precedence in the foregoing order, and debate upon any of

them shall be confined to the actual motion and shall not go into the merits of the main question, except on amendment.

5. When a vote has passed, except for adjournment or to lay on the table, any member voting with the majority may move a reconsideration to be acted upon at the same meeting. Any member voting with the minority may move a reconsideration to be acted upon at the next meeting, which latter motion shall have priority if made before the motion first mentioned shall have been decided. No motion shall be twice reconsidered.

6. No member shall be interrupted while speaking but by a call to order, or for the correction of a mistake; nor shall there be any conversation among the members while a paper is being read or a question stated from the chair.

7. When any member is about to speak in debate, he shall rise in his place and respectfully address the presiding officer, shall confine himself to the question under debate, and avoid personality.

8. In the month of January, the following committees shall be appointed:

A COMMITTEE ON BILLS IN SECOND READING.

A COMMITTEE ON COMMONS.

A COMMITTEE ON ENROLLMENT.

A COMMITTEE ON LICENSES.

A COMMITTEE ON LIGHTING STREETS.

A COMMITTEE ON POLICE.

A COMMITTEE ON REPAIRS OF STREETS.

A COMMITTEE ON SEWERS.

A COMMITTEE ON WEIGHTS AND MEASURES.

The Committees on Licenses, on Police, and on Sewers shall consist of three members each; the other committees shall be composed of two each.

9. Every member present shall be held obliged to vote on all questions, and not to leave without permission if his presence is necessary to make a quorum.

10. The clerk shall prepare for the use of the board a copy of the Orders of the Day, to which shall be added a list of matters laid on the table or postponed to a day certain.

11. When a reference is proposed to more than one committee, the question shall first be upon a standing committee of the Board, then a special committee, then a joint standing committee, and last, a joint special committee.

12. These rules may be amended or suspended whenever two thirds the members present may so vote, but a motion to amend shall not be made and finally acted upon at the same meeting.

13. All petitions for the appointment or removal of police officers and watchmen, shall, before any action thereon is taken by the Board, be referred to the Committee on Police.

14. All nominations of persons to serve as police officers and watchmen, shall, before action thereon by the Board, be referred to the Committee on Police, who shall report upon such nominations at or before the next regular meeting after such reference.

RULES AND ORDERS OF THE COMMON COUNCIL.

1. The President shall take the chair precisely at the hour appointed for the meeting, call the members to order, and within ten minutes (or sooner if a quorum be present) he shall cause the roll to be called and the names of the absentees recorded. The first business after the roll call, shall be the approval of the records of the previous meeting, which shall be approved without reading, unless their reading be called for by some member. In the absence of the President, the oldest member present shall call the Council to order, and preside until a President *pro tempore* be chosen.

2. He shall preserve order and decorum; may speak to points of order in preference to other members, rising from his seat for that purpose; and shall decide questions of order, subject to an appeal to the Council by any member.

3. He shall rise to address the Council, to state facts, but may put questions, or read, sitting.

4. He shall declare all votes; but if a vote be doubted, the President shall, without further debate, require the members voting in the affirmative and negative to rise and stand until they are counted, and he shall declare the result.

5. He may call any member to the chair, but such substitution shall not extend beyond an adjournment; and when out of the chair the President may express his opinion on any subject under debate, and he shall not resume the chair while the same question is pending.

6. All questions shall be propounded in the order in which they are moved, unless the subsequent motion be previous in its nature.

7. After a motion is stated by the President, it shall be disposed of by a vote of the Council, unless the mover withdraw it before a decision or amendment.

8. A motion to adjourn shall always be in order; that and the motion to lay on the table, shall be decided without debate.

9. The previous question shall be in this form: "Shall the main question be now put?" It shall only be admitted when demanded by a majority of the members present; and, until it is decided, shall preclude all amendment and further debate of the main question.

10. The yeas and nays shall be taken on any question upon the request of one third of the members present.

11. When two or more members happen to rise at the same time, the President shall name the member who shall speak first.

12. When any member is about to speak in debate, or deliver any matter to the Council, he shall rise in his place, and respectfully address the presiding officer, confining himself to the question under debate, and avoid personality.

13. No member shall be mentioned in debate by his name, but may be described by the place he sits in, or such other designation as may be intelligible and respectful.

14. No member speaking shall be interrupted by another, but by a call to order or to correct a mistake. If any member, in speaking or otherwise, transgress the rules of the Council, the President shall, or any member may, call him to order; in which case the member so called to order shall immediately sit down, until the question of order is decided. If the decision be in favor of the member called to order, he shall be at liberty to proceed; if otherwise, he shall not proceed without the leave of the Council.

15. No member shall speak more than twice to the same question, without obtaining leave of the Council.

16. Whilst the President or any member is speaking, none shall stand up or pass unnecessarily before the person speaking.

17. Every motion shall be reduced to writing, if the President or any member require it.

18. When a question is under debate, no motion shall be received but to adjourn, to lay on the table, for the previous

question, to postpone to a certain day, to commit, to amend, or to postpone indefinitely; which several motions shall have precedence in the order in which they are arranged; and no motion to postpone or commit shall be allowed twice in the same day, in the same stage of the ordinance or proposition.

19. A motion for the reconsideration of a vote shall be open to debate, but such motion shall not be considered unless made by a member voting with the majority, or unless notice thereof be given at the meeting at which the vote passed, in which case the motion shall be made at the next meeting after; and only one motion for the reconsideration of any vote shall be permitted.

20. Every member who shall be in the Council when a question is put shall give his vote, unless the Council, for special reasons, excuse him.

21. No motion or proposition on a subject different from that under consideration shall be admitted under color of an amendment.

22. All reports may be committed or recommitted at the pleasure of the Council.

23. The division of a question may be called for when the sense will admit of it.

24. When the reading of a paper is called for and objected to, it shall be determined by a vote of the Council.

25. No standing order of the Council shall be suspended, unless three fourths of the members present consent thereto; nor shall any rule or order be repealed or amended, without one day's notice being given of the motion therefor, nor unless a majority of the whole Council concur therein.

26. All committees, except such as the Council determine to select by ballot, shall be nominated by the President.

27. No member shall be obliged to serve on more than two committees at the same time, or be chairman of more than one.

28. All memorials and other papers addressed to the Council, shall be presented to the President, or by a member in his place, who shall explain the subject thereof, and they shall be taken up in the order in which they were presented, unless the Council shall otherwise direct.

29. Standing committees shall be appointed on the following subjects:

ON SECOND READING OF BILLS AND ORDINANCES.

ON ENROLLMENT.

ON ELECTIONS AND RETURNS.

30. No committee shall sit during the sitting of the Council without special leave, except the Committee on the Second Reading of Bills and Ordinances, and the Committee on Enrollment.

31. The rules of proceeding in the Council shall be observed in the Committee of the Whole, so far as they are applicable, except the rule limiting the time of speaking.

32. When a committee is nominated by the chair, the person first named shall be chairman. In election of committees by ballot, when a chairman is not specially chosen, the person having the highest number of votes shall act as chairman, and in case of an equality in votes between two or more members of a committee, the members thereof shall choose a chairman.

33. All ordinances and resolutions shall have two several readings before they shall be finally passed by this Council.

34. All ordinances before being read a second time shall be referred to the Committee on the Second Reading of Bills and Ordinances, and after being reported upon by said committee, shall be again read, after which second reading, the question shall be on passing the same to be enrolled.

35. No ordinance or resolution imposing penalties, or authorizing the expenditure of money, shall have more than one reading the same day.

36. The seats of the Common Council shall be numbered, and determined by lot, and no member shall change his seat but by permission of the President.

37. All committees of the Council shall consist of three members, unless a different number be specially ordered. And no report shall be received from any committee, unless agreed to in committee actually assembled; and all reports shall be in writing.

38. It shall be the duty of every committee of the Council, to whom any subject may be specially referred, to report thereon within five weeks, or ask for further time.

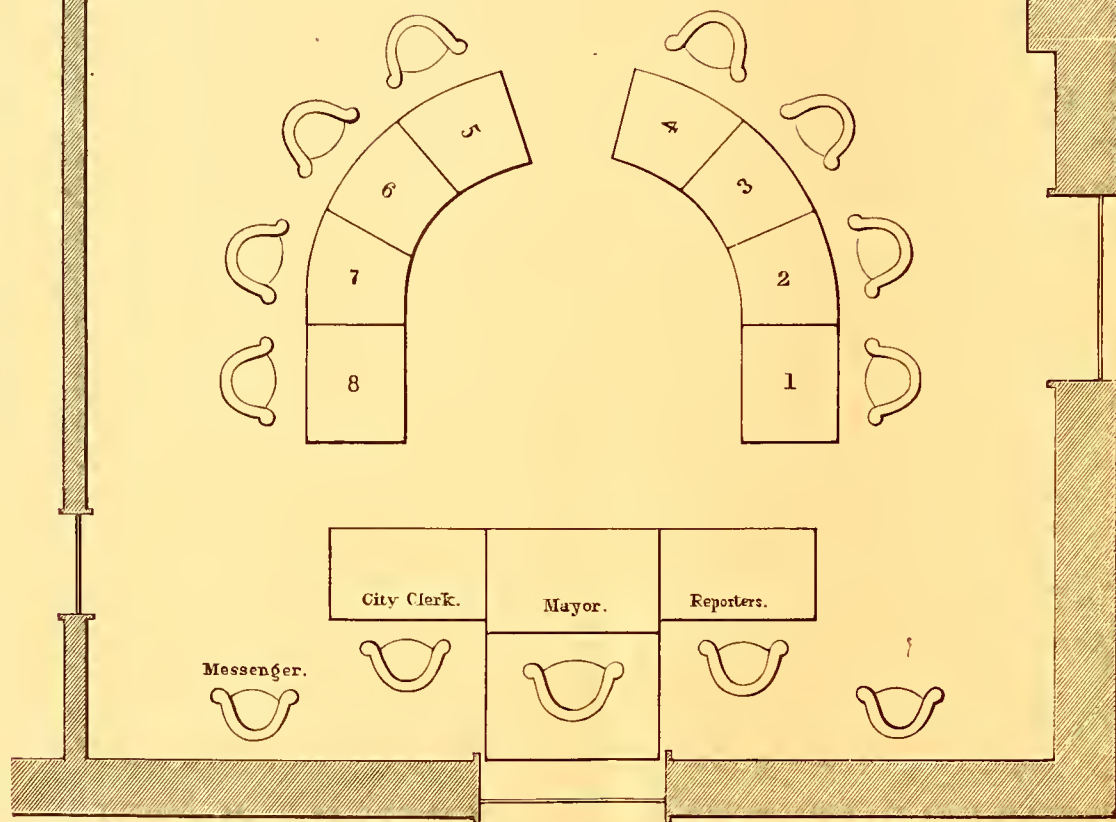
39. The clerk shall keep brief minutes of the votes and proceedings of the Council, entering thereon all accepted resolutions; shall notice reports and memorials, and other papers submitted to the board, only by their titles, or a brief description of their purport.

40. All salary officers shall be chosen by written or printed ballots, and in the election of any officers by ballot, blanks shall be counted.

41. Members of the Council may attend meetings of any of its committees, but shall not vote thereat.

42. The clerk of the Common Council shall keep the record of committees who may require that service; and on the appointment of every standing committee, a book for records shall be provided by its chairman, or by said clerk. The clerk shall have the custody of all minutes by him kept; and the records of the several committees shall be open to the inspection of the members of the City Council.

PLAN OF
ALDERMEN'S ROOM
 LOWELL MASS.



FREDERIC T. GREENHALGE,
Mayor.

1—ISAAC F. SCRIPTURE.
 2—CHARLES H. RICHARDSON.
 3—ATWILL F. WRIGHT.
 4—EDWIN LAMSON.

5—JAMES D. HARTWELL.
 6—CHARLES H. COBURN.
 7—ROBERT WOOD.
 8—JAMES C. ABBOTT.

SAMUEL A. McPHETRES, *City Clerk.*

JOHN H. NICHOLS, *Messenger.*

GOVERNMENT OF THE CITY OF LOWELL, 1880.

MAYOR.

FREDERIC T. GREENHALGE,

Wyman, near Nesmith Street.

ALDERMEN.

Chairman — JAMES C. ABBOTT.

| | |
|----------------------------|-----------------------|
| JAMES D. HARTWELL..... | 137 Moody Street. |
| ATWILL F. WRIGHT..... | 158 Appleton Street. |
| CHARLES H. RICHARDSON..... | 23 Lawrence Corp. |
| EDWIN LAMSON. | 66 Tenth Street. |
| ISAAC F. SCRIPTURE..... | 68 Chapel Street. |
| ROBERT WOOD..... | 96 Liberty Street. |
| CHARLES H. COBURN..... | 393 Merrimack Street. |
| JAMES C. ABBOTT..... | 18 Fairmount Street. |

COMMON COUNCIL.

President—EARL A. THISSELL.*Ward One.*

JAMES KELLY..... 89 Adams Street.
RICHARD J. NOONAN..... 36 Broadway.
THOMAS J. FLYNN.....221 Market Street.
LAWRENCE CUMMINGS..... 61 Adams Street.

Ward Two.

EDWIN A. ROBINSON..... 65 Boott Corp.
WILBUR L. BATES..... 25 Fifth Street.
SAMUEL W. FOSTER..... 13 Sixth Street.
EARL A. THISSELL.....125 Bridge Street.

Ward Three.

PETER H. DONOHOE..... 66 Gorham Street.
WILLIAM T. BENSON.....351 Central Street.
PATRICK A. ROGERS..... 19 Cedar Street.
FRANK WOOD..... 17 Hudson Street.

Ward Four.

FRED WOODIES..... 28 Howard Street.
CHARLES F. VARNUM..... 25 Westford Street.
CHARLES E. FARRINGTON..... 10 Hamilton Corp.
CHARLES D. STARBIRD.....103 Branch Street.

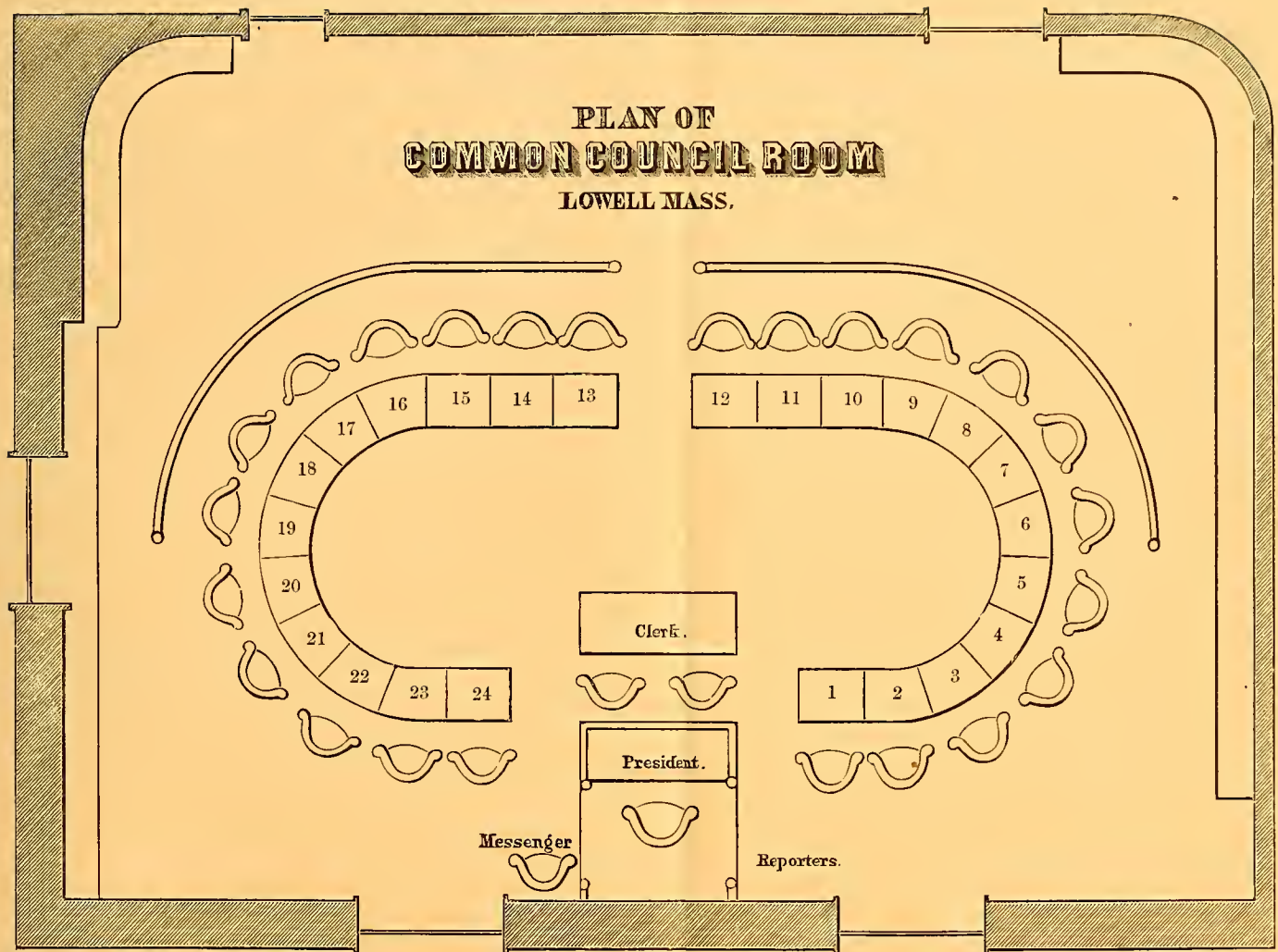
Ward Five.

JOSEPH M. WILSON.....Mt. Grove St., cor. 7th Ave.
AMBROSE L. READY.....118 Walker Street.
SAMUEL HOSMER.....116 Salem Street.
EDWARD B. PEIRCE..... 1 Austin Street.

Ward Six.

BENJAMIN F. FREEMAN..... 9 Lawrence Street.
J. TYLER STEVENS..... 68 Chestnut Street.
CHARLES C. HUTCHINSON..... 25 Nesmith Street.
HENRY C. COOPER..... 38 Clay Street.

**PLAN OF
COMMON COUNCIL ROOM
LOWELL MASS.**



EARL A. THISSELL,

President.

- | | | | |
|------------------------|----------------------|-----------------------|-------------------------|
| 1—CHAS. E. FARRINGTON. | 7—LAWRENCE CUMMINGS. | 13—EDWARD B. PEIRCE. | 19—THOMAS J. FLYNN. |
| 2—EDWIN A. ROBINSON. | 8— | 14—FRED WOODIES. | 20—AMBROSE L. READY. |
| 3—JOSEPH M. WILSON. | 9—J. TYLER STEVENS. | 15—JAMES KELLY. | 21—CHAS. C. HUTCHINSON. |
| 4—SAMUEL HOSMER. | 10—BENJ. F. FREEMAN. | 16—WILLIAM T. BENSON. | 22—CHAS. D. STARBIRD. |
| 5—SAMUEL W. FOSTER. | 11—PETER H. DONOHUE. | 17—CHARLES F. VARNUM. | 23—HENRY C. COOPER. |
| 6—WILBUR L. BATES. | 12—FRANK WOOD. | 18—RICHARD J. NOONAN. | 24—PATRICK A. ROGERS. |

DAVID CHASE, *Clerk.*

JOHN H. NICHOLS, *Messenger.*

CITY CLERK.

SAMUEL A. MCPHETRES.....School, corner Bowers Streets.

Chosen in convention of the City Council, on the first Monday in January. City Charter, Sect. 17. An Assistant City Clerk may be appointed by the Board of Aldermen, whenever the City Clerk desires it. Ord., Chap. 12, Sect. 2.

CLERK OF COMMON COUNCIL.

DAVID CHASE.....15 Fourth Street.

Chosen on the first Monday in January. City Charter, Sect. 14.

CITY MESSENGER.

JOHN H. NICHOLS.....91 Hildreth Street.

Chosen by concurrent vote in January. Ord., Chap. 23, Sect. 4.

MEETINGS OF THE CITY COUNCIL.

The Regular Meetings of the City Council are held at the City Hall, on the Second and Fourth Tuesdays of each month, except August, at 7½ o'clock in the evening, as follows:

| | | | |
|----------------|----------------|-----------------|----------------|
| January | 13th and 27th. | July | 13th and 27th. |
| February | 10th and 24th. | September | 14th and 28th. |
| March | 9th and 23d. | October | 12th and 26th. |
| April | 13th and 27th. | November | 9th and 23d. |
| May | 11th and 25th. | December | 14th and 28th. |
| June | 8th and 22d. | | |

COMMITTEES OF THE CITY COUNCIL.

JOINT STANDING COMMITTEES.

ON ACCOUNTS.—Aldermen Richardson and Wright; Councilmen Woodies, Bates, and Cooper.

ON CLAIMS.—Aldermen Abbott and Hartwell; Councilmen Robinson, Kelly, and Peirce.

ON EDUCATION.—Aldermen Coburn and Abbott; Councilmen Foster, Starbird, and Hosmer.

ON FINANCE.—The Mayor and Alderman Wright; Councilmen Hutchinson, Varnum, and Kelly.

ON FIRE DEPARTMENT.—Aldermen Wright and Lamson; Councilmen Benson, Freeman, and Flynn.

ON LANDS AND BUILDINGS.—Aldermen Hartwell and Scripture; Councilmen Varnum, Stevens, and Donohoe.

ON MILITARY AFFAIRS.—Aldermen Richardson and Wood; Councilmen Farrington, Wilson, and Rogers.

ON ORDINANCES AND LEGISLATION.—Aldermen Abbott and Scripture; Councilmen Hutchinson, Wood, and Cooper.

ON PRINTING.—Aldermen Coburn and Richardson; Councilmen Wood, Robinson, and Cummings.

ON STREETS.—Aldermen Wood and Hartwell; Councilmen Noonan, Foster, Wood, Ready, and Varnum.

STANDING COMMITTEES.

OF THE BOARD OF ALDERMEN.

- ON **BILLS IN SECOND READING.**—Aldermen Abbott and Wood.
ON **COMMONS.**—Aldermen Lamson and Abbott.
ON **LICENSES.**—Aldermen Scripture, Hartwell, and Coburn.
ON **ENROLLMENT.**—Aldermen Lamson and Wright.
ON **LIGHTING STREETS.**—Aldermen Richardson and Abbott.
ON **POLICE.**—Aldermen Coburn, Hartwell, and Scripture.
ON **REPAIRS OF STREETS.**—Aldermen Wood and Hartwell.
ON **SEWERS.**—Aldermen Lamson, Richardson, and Wright.
ON **WEIGHTS AND MEASURES.**—Aldermen Richardson and Coburn.
-

OF THE COMMON COUNCIL.

- ON **SECOND READING OF BILLS AND ORDINANCES.**—Councilmen Wilson, Bates, and Woodies.
ON **ENROLLMENT.**—Councilmen Peirce, Ready, and Stevens.
ON **ELECTIONS AND RETURNS.**—Councilmen Farrington, Starbird, and Hosmer.

CITY OFFICERS, 1880.

CITY TREASURER AND COLLECTOR OF TAXES.

JOHN H. McALVIN.....Office, City Hall.

Chosen by the City Council in convention in January. City Charter, Sect. 17. Deputy Collectors are selected and appointed by the Treasurer and Collector.

AUDITOR OF ACCOUNTS.

DAVID CHASE.....Office, City Hall.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

SUPERINTENDENT OF STREETS.

JOHN C. WOODWARD..Office, at Civil Engineer's Room, City Hall.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

SURVEYORS OF HIGHWAYS.

Mayor FREDERIC T. GREENHALGE; Alderman ROBERT WOOD;
Councilman AMBROSE L. READY.

Chosen by concurrent vote in January or February. City Charter, Sect. 17. Ord., Chap. 23, Sect. 1.

CIVIL ENGINEER FOR THE CITY.

GEORGE E. EVANS.....Office, City Hall.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

CITY SOLICITOR.

GEORGE F. LAWTON.....Office, 45 Central Street.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

LIBRARIAN OF THE CITY LIBRARY.

MARSHALL H. CLOUGH.....Office at the Library, Masonic Temple.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

DIRECTORS OF THE CITY LIBRARY.

FREDERIC T. GREENHALGE, Mayor..... } *Ex*
EARL A. THISSELL, President of the Common Council, } *Officiis.*
Ward 1—JAMES WATSON. | Ward 4—JOHN M. GREENE.
“ 2—GEORGE M. ELLIOTT. | “ 5—FREDERICK TAYLOR.
“ 3—JOSIAH L. SEWARD. | “ 6—ELI W. HOYT.

The last six are chosen by concurrent vote in January or February. Ord., Chap. 6, Sect. 2.

SUPERINTENDENT OF PUBLIC BUILDINGS.

LORENZO G. HOWE.....Office, Middle Street.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

CITY PHYSICIAN.

EDWIN W. TRUEWORTHY.....Office, Stott's Block.

Appointed by the Mayor and Aldermen, January, 1879, for three years.

SUPERINTENDENT OF BURIALS.

EDWIN W. TRUEWORTHY.....Office, Stott's Block.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

ASSESSORS OF TAXES.

Office, City Hall, third story.

JAMES MARREN. | DAVID LANE.
WILLIAM W. READ. | LEVI B. STEVENS.
ISAAC A. FLETCHER. | EVERETT W. FRENCH.
LEVI B. STEVENS, *Chairman.* JAMES MARREN, *Secretary.*

Assignment of Wards.

Ward 1—JAMES MARREN. | Ward 4—DAVID LANE.
“ 2—WILLIAM W. READ. | “ 5—LEVI B. STEVENS.
“ 3—EVERETT W. FRENCH. | “ 6—ISAAC A. FLETCHER.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

OVERSEERS OF THE POOR.

Office, City Hall.

FREDERIC T. GREENHALGE, Mayor..... *Ex-officio*.*Term expires January, 1881.*

MICHAEL CORBETT.

FRANCIS D. MUNN.

GEORGE S. CUSHING.

Term expires January, 1882.

JOSEPH S. POLLARD.

ENOS O. KINGSLEY.

PATRICK KEYES.

Chosen for two years in January, one-half retiring annually. City Charter, Sect. 29.

Sub-Committees.

ON FUEL AND OUT-DOOR RELIEF.—The Mayor, Messrs. Corbett and Cushing.

ON AGRICULTURE, NEAT CATTLE AND SWINE.—Messrs. Kingsley, Keyes, and Corbett.

ON CARE AND REPAIR OF BUILDINGS.—Messrs. Pollard, Munn, and Kingsley.

ON CLOTHING, BEDDING, AND FURNITURE.—Messrs. Cushing, Pollard, and Keyes.

ON PROVISIONS AND SUPPLIES.—The Mayor, Messrs. Corbett and Munn.

ON DISPENSARY.—Messrs. Cushing, Kingsley, and Keyes.

FREDERIC T. GREENHALGE, *Ch'n.* | LEONARD F. JEWELL, *Sec'y.*

Regular Meetings of the Board at the City Almshouse, on the last week-day of each month, at 3 o'clock, P. M.

INSTITUTIONS AT THE CITY FARM.

These consist of the Almshouse, a Workhouse used for the imprisonment of certain convicts, and "The House for the Employment and Reformation of Juvenile Offenders in the City of Lowell." The farm embraces about one hundred and twenty-five acres, seventy-five of which are in a high state of cultivation.

LORENZO PHELPS, *Superintendent.*WILLIAM A. LANG, *Chaplain, and Teacher of Reform School.*

There are also one Male Assistant and one Female Assistant. The Superintendent is appointed by the Overseers of the Poor, annually, at the last meeting in December.

MEMBERS OF THE LOWELL WATER BOARD.

Office, City Hall.

ALBERT A. HAGGETT, *President*.

From the City Council.—Alderman ROBERT WOOD; Councilmen CHARLES C. HUTCHINSON and EDWARD B. PEIRCE.

From the Citizens at Large.—ALBERT A. HAGGETT, term expires May, 1881; JAMES W. BENNETT, term expires May, 1882.

Superintendent, HORACE G. HOLDEN.*Clerk*, JAMES M. BATTLES.

The members of the Lowell Water Board are chosen by concurrent vote in January and in March or April. Ord., Chap. 41, Sect. 1. The Superintendent is chosen in March or April by concurrent vote. Ord., Chap. 41, Sect. 1. The Clerk is chosen by the Board. Ord., Chap. 41, Sect. 2.

COMMISSIONERS OF SINKING FUNDS.

ELI W. HOYT, term expires January, 1881; JOHN F. KIMBALL, term expires January, 1882; JACOB ROGERS, term expires January, 1883.

JACOB ROGERS, *Chairman*.JOHN H. McALVIN, *Secretary and Treasurer*.

The Committees are elected under the provisions of Chapter 209, of the Acts of 1875.

POLICE DEPARTMENT.

Ord., Chap. 23, Sect. 3. Chap. 279, Acts of 1867.

The members of this Department are appointed as Police Officers and Watchmen with all the powers of Constables, except the power of serving and executing civil process, by the Mayor, subject to confirmation or rejection by the Board of Aldermen, and hold their offices during the pleasure of the Board of Aldermen.

City Marshal.

ALBERT PINDER.....Office, west end of Market House Building.

Chosen by concurrent vote in January or February. Ord., Chap. 23, Sect. 1.

Deputy Marshals.

JACOB G. FAVOR.....Office, west end of Market House Building.

DAVID H. GOODHUE.....Captain of the Night Police.

Designated by the City Marshal, and appointed by Mayor and Aldermen. Ord., Chap. 23, Sect. 3.

Police Officers and Watchmen.

A portion of the following named Officers are assigned to day service, and a portion to night service, but as they are sometimes changed, they are given without any distinction.

ALBERT PINDER.
 JACOB G. FAVOR.
 DAVID H. GOODHUE.
 ALLEN P. BICKFORD.
 JOHN C. BLOOD.
 LEVI BROWN.
 JOHN BUCHANAN.
 JAMES CROWLEY.
 ASA F. ESTY.
 HENRY FARRINGTON.
 WILLIAM P. FARRINGTON.
 MOSES T. FLANDERS.
 HARRISON H. FULLER.
 JOHN C. FURLONG.
 FRANK GOODWIN, *Sergeant*.
 JAMES A. HADLEY.
 SIMON B. HARRIS.
 DANIEL HAYES.
 CHARLES HOWARD.
 THOMAS INGALLS.
 WILLIAM B. JONES.
 PATRICK KELLEY, *Sergeant*.
 DANIEL W. LANE.
 EDWARD LAVELL.

WILLIAM M. LEE.
 ALBERT E. LIBBY.
 ISAAC L. LIBBY.
 JOHN F. McCAFFREY.
 M. EUGENE McDONALD.
 JAMES McNABB.
 JAMES A. McQUADE.
 JOHN A. MELOY.
 FRANK N. MILES.
 ALONZO J. PAGE.
 HENRY C. PIKE.
 MASON W. PRESBY.
 THOMAS F. RING.
 THOMAS J. SANBORN.
 FRANK T. THISSELL.
 HENRY M. THOMPSON.
 HERMON N. TILTON.
 JOHN W. TILTON.
 LUKE VEO.
 DANIEL A. WALKER.
 THOMAS WALSH.
 JAMES E. WEBSTER.
 AUGUSTUS WEYMOUTH.
 LEVI H. WITHAM.

Supernumerary Police Officers and Watchmen.

PETER T. CORCORAN.
 WILLIS L. GARDNER.
 CHARLES GREGG.
 WILLIAM R. KEW.

SUMNER T. MITCHELL.
 JOHN O'CONNELL.
 CHARLES C. PACKARD.
 LAWRENCE ROURKE.

Special Police Officers and Watchmen not Paid by the City.

Lists of Special Police Officers are kept by the City Clerk and by the City Marshal.

Keeper of the Lock-up.

ALBERT PINDER.

Constables.

ALBERT PINDER.
 JACOB G. FAVOR.
 DANIEL G. GREENLEAF.
 JAMES HOPKINS.
 EVERETT W. FRENCH.
 JOHN H. NICHOLS.
 JOSEPH H. GUILLETT.
 HENRY KILESKI.
 DAVID FITZGERALD.

CHARLES J. SEARLE.
 JOHN P. SEARLE.
 JOSEPH R. WELCH.
 EUGENE M. HASKELL.
 JAMES W. CUMMISKEY.
 CHARLES A. CLARK.
 SIMON B. HARRIS.
 JOHN F. McCAFFREY.

City Charter, Sect. 7. Ord., Chap. 23, Sect. 2.

HEALTH COMMISSIONER.

ALBERT PINDER.....Office, City Marshal's Office.

Chosen by concurrent vote, commencing in the Board of Aldermen, in January or February. Ord., Chap. 23, Sect. 1.

BOARD OF HEALTH.

MICHAEL HOAR, for 1879-80. | JAMES W. B. SHAW, for 1880-81.

EDWIN W. TRUEWORTHY, City Physician.....*Ex-officio.**Chairman, JAMES W. B. SHAW.*

Appointed by the Mayor and Aldermen in January. Chap. 133, Acts of 1867.

SURVEYORS OF LUMBER.

LORENZO G. HOWE.
 JAMES N. MORSE.
 JOSHUA M. HADLEY.
 ALFRED P. BATEMAN.
 ATIS OSGOOD.
 JOHN F. BATEMAN.
 LUTHER SMITH.
 SAMUEL NEWHALL.

GEORGE A. ROPER.
 JAMES T. TRASK.
 CHARLES O. DAVIS.
 HARRY B. PETTINGILL.
 CHARLES E. HOWE.
 GEORGE W. CLIFFORD.
 EDWARD STOCKMAN.

Chosen by concurrent vote, commencing in the Board of Aldermen, in January or February. Ord., Chap. 23, Sect. 1.

FENCE VIEWERS.

| | | |
|-----------------|--|-------------------|
| LORENZO PHELPS. | \| | JOSHUA M. HADLEY. |
| EDWARD FIFIELD. | | |

Chosen by concurrent vote, commencing in the Board of Aldermen, in January or February. Ord., Chap. 23, Sect. 1.

FIELD DRIVERS.

| | | |
|------------------|--|----------------------|
| OTIS F. LUDWIG. | \| | CLARENCE G. COBURN. |
| NICHOLAS PIERCE. | \| | THOMAS J. UNDERWOOD. |

Chosen by concurrent vote, commencing in the Board of Aldermen, in January or February. Ord., Chap. 23, Sect. 1.

POUND-KEEPER.

ALBERT PINDER.

Chosen by concurrent vote, commencing in the Board of Aldermen, in January or February. Ord., Chap. 23, Sect. 1.

MEASURER OF WOOD AND BARK.—SUPERINTENDENT OF CITY SCALES.—INSPECTOR OF BALE OR BUNDLE HAY.

SAMUEL M. PATTERSON. Office, at City Scales, rear of Market House Building.
Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

MEASURERS OF WOOD AND BARK.

| | |
|----------------------------|--------------------------|
| FRANCIS H. CHANDLER..... | At Pawtucket Square. |
| GEORGE E. CHAMBERLAIN..... | At Middlesex Village. |
| CHARLES W. SLEEPER..... | At Lowell Machine Shop. |
| EDWARD E. AEREY..... | At Tannery, Ayer's City. |
| JAMES F. MCKISSOCK..... | At No. 25 First Street. |
| JOSEPH HOVEY..... | In Centralville. |

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

WEIGHERS OF COAL.

| | | |
|----------------------|--|------------------|
| SAMUEL M. PATTERSON. | \| | DANIEL W. HORNE. |
| AUGUSTUS W. WEEKS. | \| | LORENZO WOOD. |
| FRANK E. BENNETT. | \| | JOHN H. HOWARD. |
| DANIEL LIVINGSTON. | \| | SYDNEY DAVIS. |
| PETER MOLLAHAN. | \| |  |

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

SEALER OF WEIGHTS AND MEASURES.

JAMES MURPHY.....Office, 26 Gorham Street.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

INSPECTOR OF MILK.

JAMES W. B. SHAW.....Office, City Hall.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

*SURVEYORS OF PLASTERING, BRICK OR STONE WORK,
AND PAINTING.*

SAMUEL NEWHALL.

LUTHER SMITH.

GEORGE E. EVANS.

JOSHUA M. HADLEY.

WILLIAM F. OSGOOD.

ATIS OSGOOD.

ORA M. SNELL.

MELVIN B. SMITH.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

MEASURERS OF GRAIN.

JAMES BERRY.

GEORGE W. TILTON.

Fees $2\frac{1}{2}$ mills per bushel for measuring. Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

WEIGHERS OF HAY AND OTHER ARTICLES.

EDMUND BRICKETT...At Scales, cor. Western Ave. and Fletcher St.

FRANCIS H. CHANDLER.....At Scales, in Pawtucket Square.

ORVILLE W. PEABODY.....At Hall & Peabody's, Dutton Street.

SYDNEY DAVIS.... At Coal Yard, opposite Fair Grounds.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

*MEASURERS OF WOOD AND BARK BROUGHT BY WATER OR
RAILROAD CARS INTO THE CITY.*

SAMUEL NEWHALL.

LUTHER SMITH.

JAMES T. TRASK.

Appointed by the Board of Aldermen in January or February. Ord., Chap. 23, Sect. 2.

INSPECTORS OF PETROLEUM OILS.

RUEL F. BRITTON.

GEORGE B. ROOT.

Appointed by the Mayor and Aldermen. Chap. 152, Acts of 1869.

CITY CRIER.

WILLIAM H. DOUGHTY.

Appointed by the Mayor and Aldermen in January or February. Ord., Chap. 9, Sect. 1.

MEASURERS OF UPPER LEATHER.

NATHAN W. FRYE.

WILLIAM H. WHITE.

JOHN Q. A. HUBBARD.

EDWARD E. AEREY.

Appointed by the Board of Aldermen in April. Ord., Chap. 23, Sect. 2.

FISH WARDEN.

ABIJAH CUTTER.....Office, 25 Smith Street.

Appointed by the Mayor and Aldermen. Chap. 289, Acts of 1867.

INSPECTOR OF BOILERS.

RICHARD DOBBINS.....Office, Dutton Street.

INSPECTOR OF PROVISIONS.

ALBERT PINDER.....Office, City Marshal's Office.

Appointed by the Mayor and Aldermen. Chap. 29, Acts of 1875.

JANITOR OF HUNTINGTON AND JACKSON HALLS.

JOHN F. COSGROVE.

Appointed by the Mayor.

FIRE DEPARTMENT FOR 1880-81.

The Chief and Assistant Engineers are appointed by the Mayor and Aldermen, in the month of April, annually, for the term of one year from the first day of May next succeeding. All other members of the Fire Department are nominated by the Board of Engineers, and appointed by the Mayor and Aldermen; and vacancies may be filled and removals made at any time.

City Charter, Sect. 31. Ord., Chap. 14. Chap. 63, Acts of 1869.

Chief Engineer.

EDWARD S. HOSMER.....12 Livermore Street.

Assistant Engineers.

HIRAM N. HALL.....84 High Street.
JAMES F. NORTON.....280 Central Street.
JOSIAH W. WHITE.....74 Chapel Street.
SAMUEL W. TAYLOR.....37 Rock Street.

HIRAM N. HALL, Clerk of the Board.

The Clerk is chosen by the Engineers.

Steam Fire Engines.

Hope Steam Fire Engine Company, No. 1.

Gorham Street.....11 Members.
BENJAMIN F. CROSBY, Foreman. | JEWETT J. LOCKE, Engineer.
Weight, 7,575 pounds. Built in 1870, by the Union Machine Company, of Fitchburg.

Torrent Steam Fire Engine Company, No. 2.

Branch Street.....11 Members.
AUGUSTUS C. STEARNS, Foreman. | GEORGE MADDOCKS, Engineer.
Weight, 7,720 pounds. Built in 1868, by Hunneman & Co., Boston.

Wamesit Steam Fire Engine Company, No. 3.

Middle Street.....12 Members.
JOSEPH H. STACKPOLE, Foreman. | EDWIN L. BROWN, Engineer.
Weight, 7,650 pounds. Built in 1866, by Hunneman & Co., Boston.

*Hose Carriages.**Mazeppa Hose Company, No. 4, Fayette Street.*

WILLIAM H. HALSTEAD, Foreman.....9 Members.

Wellman Hose Company, No. 5, Fourth Street.

GEORGE W. PATTEN, Foreman.....10 Members.

Mechanics Hose Company, No. 7, Cross Street.

JOHN H. TUCKER, Foreman.....9 Members.

Excelsior Hose Company, No. 8, Central Street.

EDWARD CUNNINGHAM, Foreman.....9 Members.

*Hook and Ladder Carriages.**Franklin Hook and Ladder Company, Middle Street.*

HORATIO B. DOWNS, Foreman.....16 Members.

George Hobson Hook and Ladder Company, Middle Street.

HENRY W. BURTON, Foreman.....10 Members.

Salvage wagon, Warren Street, 7 members, 5 being call men.

There is a volunteer Hose Company in Pawtucketville.

Operator of Fire-Alarm Telegraph.

GEORGE B. WHITNEY.....Engine House, Middle Street.

*POLICE COURT.*NATHAN CROSBY.....*Standing Justice.*JOHN DAVIS
FREDERIC T. GREENHALGE }*Special Justices.*SAMUEL P. HADLEY**Clerk.*

* Chosen at the Municipal Election, 1876, and every fifth year thereafter, by the people.
Gen. Stat., and Chap. 169, Acts of 1866.

SCHOOL COMMITTEE, 1880.

FREDERIC T. GREENHALGE, Chairman.
 CHARLES H. ALLEN, Vice Chairman.
 CHARLES MORRILL, Sup't and Sec'y.

NAMES OF SCHOOL COMMITTEE.

| | | |
|--|--------------|------------------|
| FREDERIC T. GREENHALGE, Mayor..... |) | <i>Ex</i> |
| EARL A. THISSELL, President of the Common Council, |) | <i>Officiis.</i> |
| Ward 1—TIMOTHY H. BRENNAN..... | Term expires | 1880 |
| JOHN A. SMITH..... | " " | 1881 |
| " 2—DANIEL P. GALLOUPE..... | " " | 1880 |
| HENRY J. MCCOY..... | " " | 1881 |
| " 3—JOHN H. MORRISON..... | " " | 1880 |
| MICHAEL SEXTON..... | " " | 1881 |
| " 4—SOLON W. STEVENS..... | " " | 1880 |
| CHARLES H. ALLEN..... | " " | 1881 |
| " 5—GEORGE C. OSGOOD..... | " " | 1880 |
| JOHN J. COLTON..... | " " | 1881 |
| " 6—LEONARD HUNTRESS, JR..... | " " | 1880 |
| SAMUEL A. CHASE..... | " " | 1881 |

STANDING COMMITTEES.

On Accounts.—The Mayor, Messrs. Thissell, Chase, Morrison, Smith.

On School-houses and Hygiene.—Messrs. Allen, Brennan, Huntress, Galloupe, Sexton.

On Teachers.—Messrs. Galloupe, Allen, Stevens, Colton, Morrison.

On Reports.—Messrs. Huntress, Colton, Osgood, Morrison, Smith.

On Books.—Messrs. Stevens, Galloupe, Allen, Smith, Chase, Sexton.

On Salaries.—The Mayor, Messrs. Huntress, Morrison, McCoy, Galloupe.

On Penmanship and Drawing.—Messrs. Allen, Chase, Sexton, Brënnan, Huntress.

On Music.—Messrs. Stevens, Colton, Osgood, McCoy, Sexton.

On Evening Schools.—Messrs. Osgood, Brennan, McCoy, Colton, Smith.

On Rules and Regulations.—Messrs. Colton, Brennan, Osgood, Stevens, McCoy.

ASSIGNMENT OF SCHOOLS.

The Mayor.—High School, Reform School.

Mr. Thissell.—Reform School.

Mr. Brennan.—Mann School, Primaries 44, 22, 41, 43, 11, 26.

Mr. Smith.—Primaries 8, 29, 12, 23, 69, 10, 63, Mixed No. 1.

Mr. Galloupe.—High School, Varnum School, Primaries 46, 47, 48, 49, 55, 60, 61.

Mr. McCoy.—Green School, Primaries 7, 21, 53, 1, 3, 18.

Mr. Morrison.—High School, Reform School, Colburn School, Primaries 33, 56, 30, 15, 6, 5.

Mr. Sexton.—Primaries 20, 57, 13, 68, 64, 66, 59, 71.

Mr. Stevens.—High School, Edson School, Primaries 24, 28, 27, 42.

Mr. Allen.—High School, Reform School, Franklin School, Primaries 17, 34, 62, 50, 67, 31, Intermediate No. 1.

Mr. Osgood.—Reform School, Primaries 2, 65, 40, 45, 36, 38, 70, 4, 54.

Mr. Colton.—High School, Bartlett School, Primaries 32, 58, Mixed No. 2.

Mr. Huntress.—High School, Primaries 14, 25, 16, 37, 9, 51, 19, 39.

Mr. Chase.—Moody School, Primaries 35, 72, 52.

REGULAR MEETINGS OF SCHOOL COMMITTEE, 1880.

January 26, February 23, March 29, April 26, May 31, June 28, July 26, August 30, September 27, October 25, November 29, December 27.

CHARLES MORRILL, Superintendent of Public Schools.

Office in the City Hall.

OFFICE HOURS.—One hour after the forenoon session; and on Wednesday and Saturday afternoons, from 2 to 3 o'clock.

TRUANT COMMISSIONERS.

Office in the City Hall.

BICKFORD LANG,

|

WM. H. BIRMINGHAM.

no longer under these names
Edson
Franklin Mann
Reform

WARD OFFICERS, 1880.

Chosen annually at the Municipal Election held on the second Tuesday in December.

WARD ONE.

Warden... William Hart.
Clerk..... Dennis J. Crowley.
Inspectors, James D. Sullivan,
John A. Walsh,
Thomas J. Duffy.

WARD TWO.

Warden... Henry J. McAlvin.
Clerk..... Abner L. Kittredge.
Inspectors, Frank B. Peabody,
Frank K. Stearns,
George A. Saunders.

WARD THREE.

Warden... James Howard.
Clerk..... Thomas F. Kelley.
Inspectors, John J. Donohue,
John H. Keenan,
John H. Cassidy.

WARD FOUR.

Warden... Asa C. Russell.
Clerk..... Charles E. Carter.
Inspectors, W. A. Dickinson,
Charles F. Manahan,
Charles E. Howe.

WARD FIVE.

Warden... Geo. W. Batchelder.
Clerk..... Vacancy.
Inspectors, George L. Fowler,
Morton N. Peabody,
Clarence G. Coburn.

WARD SIX.

Warden... Andrew J. Hough.
Clerk..... Edward A. Coffin.
Inspectors, James Baxter,
Robert J. Shepard,
Charles L. Emerson.

INSPECTORS OF ELECTIONS.

Elected by the Mayor and Aldermen.

Terms expire November 1st in the year following their names.

WARD ONE.

George A. Scribner, 1880.
George B. Goodale, 1881.
Philip T. Bagley, 1882.

WARD TWO.

John Callahan, 1880.
James F. Puffer, Jr., 1881.
Stephen J. Kirby, 1882.

WARD THREE.

Horace Ela, 1880.
Harry Dunlap, 1881.
Michael F. Maguire, 1882.

WARD FOUR.

Miles J. Fletcher, 1880.
J. Franklin Harvey, 1881.
Irving K. Goodale, 1882.

WARD FIVE.

Edward B. Peirce, 1880.
Robert J. Thomas, 1881.
Vacancy, 1882.

WARD SIX.

Rinaldo H. Tyler, 1880.
John Doyle, 1881.
Joseph B. Varnum, 1882.

POPULATION OF LOWELL.

| Year. | Population. | Year. | Population. | Year. | Population. | Year. | Populat'n. |
|-------|-------------|-------|-------------|-------|-------------|-------|------------|
| 1828 | 3,532 | 1836 | 17,633 | 1846 | 29,127 | 1865 | 30,990 |
| 1830 | 6,477 | 1837 | 18,010 | 1850 | 33,383 | 1866 | 36,878 |
| 1832 | 10,254 | 1840 | 20,981 | 1855 | 37,554 | 1870 | 40,928 |
| 1833 | 12,963 | 1844 | 25,163 | 1860 | 36,827 | 1875 | 49,688 |

1905 85000 +

POPULATION, LEGAL VOTERS, ETC., BY WARDS.

| WARDS. | 1875 — Census. | | Registered Voters, Dec., 1879. | | | Vote for Mayor, '79.* | |
|------------|----------------|---------|--------------------------------|----------|--------|-----------------------|----------|
| | Popul'tn. | Voters. | Males. | Females. | Total. | Green-halge. | Crowley. |
| 1..... | 10,263 | 1,617 | 1,448 | 8 | 1,456 | 459 | 706 |
| 2..... | 8,645 | 1,528 | 1,545 | 25 | 1,570 | 812 | 464 |
| 3..... | 8,765 | 1,484 | 1,553 | 22 | 1,575 | 473 | 765 |
| 4..... | 6,919 | 1,554 | 1,420 | 13 | 1,433 | 864 | 262 |
| 5..... | 6,938 | 1,377 | 1,428 | 35 | 1,463 | 740 | 421 |
| 6..... | 8,058 | 1,501 | 1,533 | 49 | 1,582 | 744 | 530 |
| Total..... | 49,688 | 9,061 | 8,927 | 152 | 9,079 | 4,092 | 3,148 |

* For Mayor in 1879, George J. Carney received 88 votes, and there were 7 scattering.

CATALOGUE
OF THE
GOVERNMENT OF THE CITY OF LOWELL,
IN
CHRONOLOGICAL ORDER OF SERVICE,
FROM ITS INSTITUTION, 1836, TO 1879.

1836.**Mayor:**

ELISHA BARTLETT.

Aldermen:

William Austin, resigned Oct. 10,
Joseph Tapley, elected November,
Seth Ames,
Aaron Mansur,

Benjamin Walker,
Oliver M. Whipple,
Alexander Wright.

SAMUEL A. COBURN, *City Clerk*.**Common Council:**

John Clark, *President*,
Henry J. Baxter,
Jonathan Bowers,
George Brownell,
James Cook,
David Dana,
Erastus Douglass,
Josiah B. French,
Cyril French,
Samuel Garland,
Horatio W. Hastings,
Horace Howard,

Stephen Mansur,
John Mixer,
Thomas Nesmith,
David Nourse,
Thomas Ordway,
James Russell,
John A. Savels,
Sidney Spalding,
Weld Spalding,
Jonathan Tyler,
Tappan Wentworth,
William Wyman.

GEORGE WOODWARD, *Clerk*, died. ALBERT LOCKE, elected.**1837.****Mayor:**

ELISHA BARTLETT, † '36.

Aldermen:

Seth Ames, * '36,
John Aiken,
Seth Chellis,

Joseph G. Kittredge,
Joshua Swan,
Alexander Wright, * '36.

SAMUEL A. COBURN, *City Clerk*.**Common Council:****WARD 1.**

Joshua Abbott,
James K. Fellows,
Jesse Phelps,
Walter Wright.

WARD 2.

William Fiske,
Thomas Nesmith, '36.
Josiah Osgood,
Joseph Tyler.

WARD 3.

Joseph M. Dodge,
Elisha Huntington, *President*,
William North,
Joseph Tapley.

WARD 4.

William Baker,
Elijah M. Read,
Charles H. Wilder,
William W. Wyman.

WARD 5.

George Brownell, '36,
Osgood Dane,
James Russell, '36.
Tappan Wentworth, '36.

WARD 6.

Andrew Bird,
Benjamin H. Gage,
Jona. T. P. Hunt,
Abram Tilton.

ALBERT LOCKE, *Clerk*.

The figures without other marks indicate membership of the Common Council those years.
† Mayor that year. * Alderman that year. † President of Common Council that year.

1838.

Mayor :

LUTHER LAWRENCE.

Aldermen :

Benjamin F. French,
Charles L. Tilden,
Oliver M. Whipple, * '36,

George H. Carleton,
George Brownell, '36, '37,
Seth Chellis, * '37.

THOMAS ORDWAY, *City Clerk.***Common Council :**

WARD 1.

Jesse Phelps, '37,
Walter Wright, '37,
Eliphalet Brown,
Perez Fuller.

WARD 2.

William Fiske, '37.
Aaron H. Sherman,
William Upham,
Henry J. Baxter, '36.

WARD 3.

Thomas Hopkinson,
Elisha Huntington, ‡ '37, *President.*
Horace Howard, '36.
John Mixer, '36.

WARD 4.

David Dana, '36,
Perley Hale,
Benjamin Walker, * '36,
William Baker, '37.

WARD 5.

Garret J. Bradt,
Benjamin Wilde,
Erastus Douglass, * '36,
Rufus Paul.

WARD 6.

Eli Cooper,
Thomas L. Randlett,
James L. Foot,
Calvin Goodspeed.

ALBERT LOCKE, *Clerk.*

1839.

Mayor :

LUTHER LAWRENCE. — [Died in April.]

ELISHA HUNTINGTON, ‡ '37, ‡ '38.

Aldermen :

Benjamin F. French, * '38,
John O. Green,
Charles L. Tilden, * '38.

George H. Carleton, * '38.
John Clark, ‡ '36.
Oliver M. Whipple, * '36, * '38.

THOMAS ORDWAY, *City Clerk.***Common Council :**

WARD 1.

Walter Wright, '37, '38.
Harlin Pillsbury,
Eliphalet Brown, '38,
Forrest Eaton.

WARD 2.

Jonathan Tyler, '36.
John Nesmith,
Henry J. Baxter, '36, '38.
Jefferson Bancroft.

WARD 3.

Thomas Hopkinson, '38, *President,*
Jacob Robbins,
John G. Locke.

WARD 4.

Benjamin Walker, * '36, '38,
Samuel Horn,
Stephen Carleton,
Stephen Mansur, '36.

WARD 5.

Tappan Wentworth, '36, '37,
Lewis McIntire, died Feb., '40.
Benjamin Wilde, '38.
Garret J. Bradt, '38.

WARD 6.

Thomas L. Randlett, '38.
Joseph S. Holt,
John L. Fitts,
Daniel Knapp.

ALBERT LOCKE, *Clerk.*

1840.

Mayor:

ELISHA HUNTINGTON, †'37, †'38, †'39.

Aldermen:

Jonathan Tyler, '36, '39.
John R. Adams,
Joseph Bedlow,

Harlin Pillsbury, '39,
Seth Ames, *'36, *'37,
Stephen Mansur, '36, '39.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Forrest Eaton, '39.
Sylvanus Adams,
Henry Patch,
R. M. Hutchinson.

WARD 2.

Jefferson Bancroft, '39,
John Nesmith, '39,
Joseph G. Kittredge, *'37,
Josiah Osgood, '37.

WARD 3.

Pelham W. Warren, *President*,
Abner W. Buttrick,
Asa Hall,
Samuel Burbank.

WARD 4.

Ferdinand Rodliff.
Ethan Burnap,
Edward F. Watson,
B. Walker, *'36, '38, '39, died Sept.

WARD 5.

Tappan Wentworth, '36, '37, '39,
Samuel W. Brown,
John J. Crane,
George Dane.

WARD 6.

Daniel Knapp, '39,
George L. Fitts, '39,
Joseph Battles,
Joshua Converse.

ALBERT LOCKE, *Clerk*, died October. JOHN G. LOCKE, elected October.

1841.

Mayor:

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40.

Aldermen:

Seth Chellis, *'37, '38.
Jefferson Bancroft, '39, '40.
Cyril French, '36,

George H. Carleton, *'38, *'39.
John R. Adams, *'40.
John Aiken, *'37.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Henry Patch, '40,
George Bragdon,
John W. Holland,
Arnold Welch.

WARD 2.

William Fiske, '37, '38
Erasmus D. Leavitt,
Jonathan White,
Nathaniel Wilson.

WARD 3.

Samuel Burbank, '40,
Nathaniel Critchett,
Royal Southwick,
Edward Winslow.

WARD 4.

Ethan Burnap, '40,
William Livingston,
John Morrison,
Edward F. Watson, '40.

WARD 5.

Tappan Wentworth, '36, '37, '39,
'40, *President*.
Samuel W. Brown, '40.
John J. Crane, '40.
Phineas Whiting.

WARD 6.

Francis H. Bowers,
Isaac H. Cooper,
William Potter,
John Smith.

JOHN G. LOCKE, *Clerk*.

1842.

Mayor:

NATHANIEL WRIGHT.

Aldermen:

Nathaniel Thurston,
 Jefferson Bancroft, '39, '40, '41,
 Cyril French, '36, * '41,

William Livingston, '41,
 Ithamar A. Beard,
 John W. Graves.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Jeremiah P. Jewett,
 John Hadley,
 James Townsend,
 Edward J. Payne.

WARD 2.

John Nesmith, '39, '40,
 Erasmus D. Leavitt, '41,
 Joseph W. Mansur, *President*,
 James Hopkins.

WARD 3.

Nathaniel Critchett, '41,
 Ira Spalding,
 John Mead,
 Asa W. Willoughby.

WARD 4.

John Morrison, '41,
 William Carlton,
 Oliver March,
 Josiah B. French, '36.

WARD 5.

James Patterson.
 Isaac Appleton,
 Josiah Seavey,
 Roswell Douglass.

WARD 6.

James Russell, '36, '37,
 Jonathan Kendall,
 Varnum A. Shed,
 Isaac N. Fitts.

JOHN G. LOCKE, *Clerk*.

1843.

Mayor:

NATHANIEL WRIGHT, †'42.

Aldermen:

Harlin Pillsbury, '39, * '40, res'd June,
 Henry C. Johnson,
 Cyril French, '36, * '41, * '42,

S. Spalding, '36, resigned in June.
 Joseph Griffin,
 Charles L. Tilden, * '38, '39.

THOMAS ORDWAY, *City Clerk*.

Common Council:

WARD 1.

Daniel Bixby,
 Edward J. Payne, '42,
 Hugh Cummiskey,
 Walter Wright, '37, '38, '39.

WARD 2.

Henry J. Baxter, '36, '38, '39,
 John P. Simonds,
 Pliny Lawton,
 Ben Osgood.

WARD 3.

John Mead, '42,
 Willard Brown,
 Ira Spalding, '42,
 Benjamin J. Gerrish.

WARD 4.

Otis Allen,
 Alfred Gilman,
 Oliver March, '42, *President*,
 William Carlton, '42.

WARD 5.

James Patterson, '42,
 David Bradt,
 John L. Tripp,
 Benjamin F. Holden,

WARD 6.

John B. McAlvin,
 Cyrus Battles,
 Sewall G. Mack,
 Charles F. Mitchell.

JOHN G. LOCKE, *Clerk*.

1844.

Mayor:

ELISHA HUNTINGTON, ‡ '37, ‡ '38, † '39, † '40, † '41.

Aldermen:

Henry Smith,
Selwin Bancroft,
O. M. Whipple, * '36, * '38, * '39,

Edward F. Watson, '40, '41,
Joseph Griffin, * '43,
John Wright.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Forrest Eaton, '39, '40,
Gilman N. Nichols,
Hugh Cummiskey, '43,
David Healey.

WARD 2.

John P. Simonds, '43,
Ben Osgood, '43,
Amos Merriam,
John Clark, ‡ '36, * '39, *President.*

WARD 3.

Charles B. Coburn,
George Choate,
Isaac Scripture,
William C. Gray.

WARD 4.

Asa Wetherbee,
Abner W. Buttrick, '40,
Horatio G. F. Corliss,
Charles H. Wilder, '37.

WARD 5.

John L. Tripp, '43,
David Bradt, '43,
John Wright,
Nathaniel Wright, Jr.

WARD 6.

Sewall G. Mack, '43,
James Russell, '36, '37, '42,
Jonathan Kendall, '42,
Gilman Gale.

JOHN G. LOCKE, *Clerk.*

1845.

Mayor:

ELISHA HUNTINGTON, ‡ '37, ‡ '38, † '39, † '40, † '41, † '44.

Aldermen:

Henry Smith, * '44,
Selwin Bancroft, * '44,
O. M. Whipple, * '36, * '38, * '39, * '44,

Edward F. Watson, '40, '41, * '44,
John C. Dalton,
Daniel Knapp, '39.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Gilman N. Nichols, '39,
Danforth P. Brigham,
Jonathan Adams,
Willard C. Welch.

WARD 2.

John P. Simonds, '43, '44,
Daniel Balch,
William Brown,
Daniel S. Richardson, *President.*

WARD 3.

Isaac Scripture, '44,
William C. Gray, '44,
George Choate, '44,
Hapgood Wright.

WARD 4.

Abner W. Buttrick, '40, '44,
Asa Wetherbee, '44,
Charles H. Wilder, '37, '44,
Josiah Sawtell.

WARD 5.

Nathaniel Wright, Jr., '44,
Amos Hyde,
Edward Sherman,
James Fenno.

WARD 6.

Gilman Gale, '44,
John B. McAlvin, '43,
Samuel Fay, Jr.,
Lorenzo P. Wright.

JOHN G. LOCKE, *Clerk.*

1846.**Mayor:**

JEFFERSON BANCROFT, '39, '40, *'41, *'42.

Aldermen:

Henry Smith, *'44, *'45,
 Selwin Bancroft, '44, *'45,
 William C. Gray, '44, '45,
 Joseph Butterfield,

John C. Dalton, '45,
 D. Knapp, '39, *'45, resigned July,
 Isaac Cooper, '41, elected August.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Gilman N. Nichols, '39, '45,
 Danforth P. Brigham, '45,
 Willard C. Welch, '45,
 Thomas S. Hutchinson.

WARD 2.

Daniel Balch, '45,
 William Brown, '45,
 Daniel S. Richardson, †'45, *President*,
 Zadock Rogers.

WARD 3.

Hapgood Wright, '45,
 Isaac Farrington,
 Joel Powers,
 Franklin Mead.

WARD 4.

Josiah Sawtell, '45,
 Solon Stevens,
 David J. Moody,
 William Fletcher.

WARD 5.

Amos Hyde, '45,
 Horatio G. F. Corliss, '44,
 Jonathan Bowers, '36,
 Charles M. Short.

WARD 6.

Lorenzo P. Wright, '45,
 John L. Fitts, '39, '40,
 Lewis Packard,
 Columbus J. Hubbard.

JOHN G. LOCKE, *Clerk.***1847.****Mayor:**

JEFFERSON BANCROFT, '39, '40, *'41, *'42, †'46.

Aldermen:

George Bragdon,
 Joseph Butterfield, *'46,
 Linus Child,
 James Fenno, '45,

Elisha Huntington, †'37, †'38,
 †'39, †'40, †'41, †'44, †'45,
 Sewall G. Mack, '43, '44,
 Stephen Mansur, '36, '39, *'40,
 Josiah Sawtell, '45, '46.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

William Conihe,
 James C. Crombie,
 David S. Bachelder,
 Jesse Huse.

WARD 2.

Samuel W. Brown, '40, '41,
 Hannibal Powers,
 William Newman,
 Otis L. Allen.

WARD 3.

Joel Powers, '46,
 Franklin Mead, '46,
 Isaac Farrington, '46,
 Samuel G. Davis.

WARD 4.

Joel Adams, *President*,
 Horatio Fletcher,
 Solon Stevens, '46,
 Stephen A. Coburn.

WARD 5.

Ignatius Tyler,
 Edward C. Johnson,
 Elihu Gates,
 Charles M. Short, '46.

WARD 6.

Thomas Wentworth,
 Isaac N. Parker,
 John R. Southwick,
 Isaiah Morse.

JOHN G. LOCKE, *Clerk.*

1848.**Mayor:**

JEFFERSON BANCROFT, '39, '40, *'41, *'42, †'46, †'47.

Aldermen:

David Dana, '36, '38,
 Erastus Douglass, '36, '38,
 Jacob Graves, resigned in June,
 William Newman, '47.

Gilman N. Nichols, '39, '45, '46,
 Daniel S. Richardson, †'45, †'46,
 Josiah Sawtell, '45, '46, *'47,
 O. M. Whipple, *'36, *'38, *'39, *'45.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

William Conihe, '47,
 James C. Crombie, '47,
 Jesse Huse, '47,
 Gerry Wilson.

WARD 2.

Otis L. Allen, '47,
 William H. Flagg,
 John Nesmith, '39, '40, '42,
 Hannibal Powers, '47.

WARD 3.

Alfred Gilman, '43,
 Thomas Hopkinson, '38, '39, *President*,
 Ransom Reed,
 Nathaniel Critchett, '41, '42.

WARD 4.

John Avery,
 Otis Allen, '43,
 Abiel Rolfe,
 Horace Howard, '36, '38.

WARD 5.

Ignatius Tyler, '47,
 Elihu Gates, '47,
 Edward C. Johnson, '47,
 Charles M. Short, '46, '47.

WARD 6.

Thomas Wentworth, '47,
 Isaac N. Parker, '47,
 Jeremiah M. Currier,
 Horace Parmenter.

JOHN G. LOCKE, *Clerk.***1849.****Mayor:**

JOSIAH B. FRENCH, '36, '42.

Aldermen:

James B. Francis,
 Cyril French, '36, *'41, *'42, *'43,
 James H. B. Ayer,
 Daniel D. Crombie,

Daniel Carter,
 George Brownell, '36, '37, *'38,
 Artemas L. Brooks,
 Joseph Bedlow, *'40.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Jesse Huse, '47, '48, resigned Feb.,
 William A. Richardson, elected Mar.,
 Gerry Wilson, '48,
 John W. Smith,
 Alfred S. Saunders.

WARD 2.

William H. Flagg, '48,
 Ivers Taylor,
 Isaac S. Morse, resigned,
 Ambrose Lawrence.

WARD 3.

Alfred Gilman, '43, '48,
 Elisha Davis,
 James Dinsmoor,
 Andrew C. Wheelock.

WARD 4.

Nathaniel B. Favor,
 Caleb Crosby,
 Ezekiel Wright,
 Waldo A. Fisher.

WARD 5.

Maynard Bragg,
 Joshua Decatur,
 Abram T. Melvin,
 W. W. Morse.

WARD 6.

William Lamson, Jr.,
 Jeremiah M. Currier, '48,
 George S. Wright,
 John Aiken, *'37, *'41, *President.*

GEORGE A. BUTTERFIELD, *Clerk.*

1850.

Mayor:

JOSIAH B. FRENCH, '36, '42. † '49.

Aldermen:

James H. B. Ayer, * '49.
Joseph Bedlow, * '40, * '49.
Daniel D. Crombie, * '49,
James B. Francis, * '49.

Philip Hardy.
John Mixer, '36, '38,
Josiah G. Peabody,
James Townsend, '42.

THOMAS ORDWAY, *City Clerk*.**Common Council:**

WARD 1.

John W. Smith, '49,
Daniel R. Kimball,
James Watson,
Jonathan Smothers.

WARD 2.

Ivers Taylor, '49, *President*.
George Gardner,
Samuel Lawrence, 2d,
Samuel J. Varney.

WARD 3.

Jonathan Page,
John Tripp,
Fordyce Coburn,
Joshua Merrill.

GEO. A. BUTTERFIELD, *Clerk*, res'd May.

WARD 4.

Abner W. Buttrick, '40, '44, '45,
Caleb Crosby, '49,
Benjamin Goddard,
Nathaniel B. Favor, '49.

WARD 5.

George P. Elliot.
William Fiske, '37, '38, '41,
George W. Worthen.
Maynard Bragg, '49.

WARD 6.

Albert Mallard,
Stephen P. Sargent.
George S. Wright, '49.
Wm. Lamson, Jr., '49, res'd May.

WM. LAMSON, JR., elected May.

1851.

Mayor:

JAMES H. B. AYER, * '49, * '50.

Aldermen:

William Fiske, '37, '38, '41, '50.
Ambrose Lawrence, '49.
James Townsend, '42, * '50,
Philip Hardy, * '50,

William North, '37,
Abiel Rolfe, '48,
Lucius A. Cutler,
Joshua Converse, '40.

THOMAS ORDWAY, *City Clerk*.**Common Council:**

WARD 1.

James Watson, '50,
Jonathan Smothers, '50,
Charles B. Coburn, '44,
Stephen Moar.

WARD 2.

Linus Child, * '47,
George Gardner, '50, *President*,
Samuel J. Varney, '50.
Zachariah B. Caverly.

WARD 3.

Fordyce Coburn, '50,
William Twichell,
Darius C. Brown,
Benjamin C. Sargeant.

WARD 4.

Benjamin Goddard, '50,
Richard Dennis,
Holland Streeter,
Solomon D. Emerson.

WARD 5.

George P. Elliot, '50,
Edward Fife'd.
John N. Ford,
Theodore H. Sweetser.

WARD 6.

George W. Worthen, '50.
George W. Jones, died Sept.,
Stephen P. Sargent, '50.
Albert Mallard, '50.

WILLIAM LAMSON, JR., *Clerk*.

1852.

Mayor:

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44, †'45, *'47.

Aldermen:

Joseph Bedlow, *'40, *'49, *'50,
 Joseph M. Bullens,
 Samuel Burbank, '40, '41,
 Joseph B. V. Coburn,

Wm. Fiske, '37, '38, '41, '50, *'51,
 William North, '37, *'51,
 Alpha Stevens,
 Samuel J. Varney, '50, '51.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Rufus Rogers,
 John C. Smith,
 Jeremiah Clark,
 Paul Hill.

WARD 2.

Paul Perkins,
 Milton Bonney,
 William Hovey,
 Zachariah B. Caverly, '51.

WARD 3.

Darius C. Brown, '51.
 William Twichell, '51.
 Benjamin C. Sargeant, '51. *President,*
 Michael B. Caswell.

WARD 4.

Holland Streeter, '51,
 Elbridge Livingston,
 Abram French,
 Willard Minot.

WARD 5.

Edward Fifield, '51,
 Phineas Whiting, '41,
 George W. Patterson,
 Jonathan Kendall, '42, '44.

WARD 6.

Leonard W. Jaquith,
 Seth Pooler,
 Caleb G. Weaver,
 William C. Parker.

WILLIAM LAMSON, JR., *Clerk.*

1853.

Mayor:

SEWALL G. MACK, '43, '44, *'47.

Aldermen:

Elisha Huntington, †'37, †'38, †'39,
 †'40, †'41, †'44, †'45, *'47, †'52;
 Samuel K. Hutehinson,
 Stephen Mansur, '36, '39, *'40, *'47,
 Joseph B. V. Coburn, *'52,

Ira Spalding, '42, '43,
 Joseph M. Bullens, *'52,
 Alpha Stevens, *'52,
 Joseph White.

THOMAS ORDWAY, *City Clerk.***Common Council:****WARD 1.**

Rufus Rogers, '52,
 John C. Smith, '52,
 Marcus A. Thomas,
 James Cook, '36.

WARD 2.

Paul Perkins, '52,
 Milton Bonney, '52,
 George G. Bumpus,
 George W. Stanley.

WARD 3.

Michael B. Caswell, '52.
 Calvin Philbrick,
 Leonard Brown,
 Henry H. Wilder.

WARD 4.

Abram French, '52,
 Henry C. Howe,
 Joseph S. Grush,
 Samuel K. Pickering.

WARD 5.

George W. Patterson, '52.
 Wm. A. Richardson, '49. *Presid't.*
 Patrick Conlan,
 Jonathan Bowers.

WARD 6.

Caleb G. Weaver, '52,
 William C. Parker, '52,
 George F. Woods,
 C. F. Blanchard.

WILLIAM LAMSON, JR., *Clerk.*

1854.**Mayor:**

SEWALL G. MACK, '43, '44, *'47, †'53.

Aldermen:

Elisha Huntington, †'37, †'38, †'39, †'40,
 †'41, †'44, †'45, *'47, †'52, *'53,
 J. B. V. Coburn, *'52, *'53, res'd Jan.,
 Samuel K. Hutchinson, *'53,
 Ira Spalding, '42, '43, *'53,

Joseph White, *'53,
 Horatio Fletcher, '47,
 C. F. Blanchard, '53,
 Charles Sperry.

WILLIAM LAMSON, JR., *City Clerk.***Common Council:****WARD 1.**

John C. Smith, '52, '53,
 Paul Hill, '52,
 Marcus A. Thomas, '53,
 Thomas Lennon.

WARD 2.

George W. Stanley, '53,
 William H. Gage,
 Amos A. Taylor,
 William H. Bradley.

WARD 3.

Calvin Philbrick, '53,
 Leonard Brown, '53, declined,
 Darius C. Brown, '51, '52, elected,
 Henry H. Wilder, '53,
 Peter O. C. Frawley.

WARD 4.

Henry C. Howe, '53,
 Joseph S. Grush, '53,
 Samuel K. Pickering, '53,
 Hubbard Wilson.

WARD 5.

William A. Richardson, '49, †'53,
President,
 Jonathan Bowers, '53,
 Patrick Conlan, '53,
 John C. Woodward.

WARD 6.

George F. Woods, '53,
 Charles S. Eastman,
 Levi H. Straw,
 William P. Webster.

LEONARD BROWN, *Clerk.***1855.****Mayor:**

AMBROSE LAWRENCE, '49, '51.

Aldermen:

Wm. Fiske, '37, '38, '41, '50, *'51, *'52,
 Artemas L. Brooks, *'49,
 Daniel Woodward,
 Lorenzo G. Howe,

Andrew T. Nute,
 Abner Frost,
 William S. Johnston,
 Shadrach R. Brackett.

WILLIAM LAMSON, JR., *City Clerk.***Common Council:****WARD 1.**

Maynard Bragg, '49, '50,
 Aaron B. Young,
 Augustus B. Roby,
 George L. Harris.

WARD 2.

William G. Morse,
 George K. Paul,
 Mark H. Cook,
 Joseph A. Patten.

WARD 3.

Alfred Gilman, '43, '48, '49, *President,*
 Daniel Hurd,
 Theodore Warren,
 Stephen K. Fielding.

WARD 4.

Joshua W. Daniels,
 John Bennett,
 Alanson Folsom,
 Francis H. Nourse.

WARD 5.

John C. Woodward, '54,
 Stephen Bartlett,
 Jonathan Johnson,
 Oliver P. Rand.

WARD 6.

Levi H. Straw, '54,
 William T. Whitten,
 Lucien P. Stacy,
 James M. Moore.

LEONARD BROWN, *Clerk.*

1856.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44,
†'45, *'47, †'52, *'53, *'54.

Aldermen:

Edward Tuck,
Samuel Burbank, '40, '41, *'52,
Charles B. Coburn, '44,
William P. Webster, '54,
Hapgood Wright, '45, '46,

Charles H. Wilder, '37, '44, '45,
O. J. Conant, resigned in March,
James H. Rand,
Jonathan Johnson, elected in
June.

WILLIAM LAMSON, JR., *City Clerk.*

Common Council:**WARD 1.**

Enos O. Kingsley,
Abiel Pevey,
David M. Collins,
Marshall E. Thompson.

WARD 2.

Isaac Hinckley,
Seth Gage,
Peter Flanders, Jr.,
Leonard F. Jewell.

WARD 3.

David Rogers,
Benj. C. Sargeant, '51, †'52, *President*,
Henry H. Carroll,
Peter Powers.

WARD 4.

Francis H. Nourse, '55,
Alden B. Buttrick,
Holland Streeter, '51, '52,
James Sands.

WARD 5.

Frederick Holton,
Isaac Place,
Albert Wheeler,
Abiel Rolfe, '48, *'51.

WARD 6.

Eliphalet Hills,
Jonathan P. Folsom,
James K. Fellows, '37,
John K. Chase.

JAMES J. MAGUIRE, *Clerk.*

1857.**Mayor:**

STEPHEN MANSUR, '36, '39, *'40, *'47, *'53.

Aldermen:

Andrew T. Nute, *'55,
John C. Woodward, '54, '55,
Jonathan Smothers, '50, '51,
Samuel W. Stickney.

John B. Tuttle,
Francis H. Nourse, '55, '56,
Jonathan Johnson, '55, *'56,
John Nesmith, '39, '40, '42, '48.

WILLIAM LAMSON, JR., *City Clerk.*

Common Council:**WARD 1.**

Abiel Pevey,
Stephen T. Stanley,
Charles A. Welch,
George F. Scribner.

WARD 2.

William G. Morse, '55,
William D. Vinall,
Temple Tebbetts,
James M. Howe.

WARD 3.

Benjamin C. Sargeant, '51, †'52, †'56,
David Rogers, '56,
Henry H. Carroll, '56,
Nathan Allen.

WARD 4.

Caleb Crosby, '49, '50,
John F. Howe,
John C. Jepson,
Alanson Nichols.

WARD 5.

Frederick Holton, '56, *President*,
William H. Wiggin,
William Goodale,
Charles Hubbard.

WARD 6.

Erastus Boyden,
Jonathan Kimball,
Robert J. Garrett,
William Nichols.

HENRY A. LORD, *Clerk.*

1858.**Mayor:**

ELISHA HUNTINGTON, †'37, †'38, †'39, †'40, †'41, †'44,
†'45, *'47, †'52, *'53, *'54, †'56.

Aldermen:

| | |
|---|-----------------------|
| Sewall G. Mack, '43, '44, *'47, †'53, †'54. | Joseph M. Dodge, '37, |
| Samuel W. Stickney, *'57. | Harvey Silver, |
| Abiel Pevey, '56, '57. | Albert Wheeler, '56, |
| Jeremiah P. Jewett, '42. | Edwin A. Alger. |

JOHN H. McALVIN, *City Clerk.*

Common Council:**WARD 1.**

Charles Wilkins,
John M. Maynard,
John E. Webb,
William Barnard.

WARD 2.

Edward Tuck, *'56,
William P. Webster, '54, *'56,
Andrew Blood,
William F. Salmon.

WARD 3.

Benjamin C. Sargeant, '51, †'52, †'56,
'57, *President*,
Hanover Dickey,
Joseph A. Brabrook,
Benjamin S. Butterworth.

WARD 4.

Enoch P. Young,
Zephaniah Goward,
Jesse Blake,
John F. Howe, '57.

WARD 5.

Willard Dudley,
Samuel T. Manahan,
Isaac Page,
John Avery, 2d.

WARD 6.

William Nichols, '57,
Alpha B. Farr, resigned in Jan.,
Leonard Brown, '53, '54, elec'd Feb.,
Erastus Boyden, '57,
James H. Rand, *'56, resign'd May,
Eben'r Burgess, elected in June.

GEORGE GARDNER, *Clerk.*

1859.**Mayor:**

JAMES COOK, '36, '53.

Aldermen:

Lorenzo G. Howe, *'55.
Samuel J. Varney, '50, '51, *'52.
Paul Hill, '52, '54.
Ambrose Lawrence, '49, '51, †'55, re-
signed in April.
Darius C. Brown, '51, '52.

John F. Howe, '57, '58,
Joshua Converse, '40, *'51, re'd Apr.
J. P. Folsom, '56, resign'd in April.
Edward Tuck, *'56, '58, elect'd May,
Sam'l T. Manahan, '58, elec'd May,
Jonathan Ladd, elected in May.

JOHN H. McALVIN, *City Clerk.*

Common Council:**WARD 1.**

John E. Webb, '58.
Charles Wilkins, '58.
William Barnard, '58.
William D. Blanchard.

WARD 2.

W. P. Webster, '54, *'56, '58, *President*.
William F. Salmon, '58.
James M. Howe, '57.
David Nichols.

WARD 3.

George Hobson.
Asahel D. Puffer,
John Willoughby,
Benjamin S. Butterworth, '58.

WARD 4.

Caleb Crosby, '49, '50, '57,
Jesse Blake, '58,
George W. Partridge,
George W. Young.

WARD 5.

Horatio G. F. Corliss, '44, '46,
Luther B. Morse,
Josiah G. Peabody, *'50,
William Goodale, '57.

WARD 6.

Charles A. Stott,
Levi Sprague,
Ebenezer Burgess, '58,
Leonard Brown, '53, '54, '58.

GEORGE GARDNER, *Clerk.*

1860.**Mayor:**

BENJAMIN C. SARGEANT, '51, †'52, †'56, '57, †'58.

Aldermen:

Edward F. Watson, '40, '41, *'44, *'45.

Lorenzo G. Howe, *'55, *'59.

James Watson, '50, '51.

William G. Morse, '55, '57.

Henry H. Wilder, '53, '54.

Abner Frost, *'55.

Samuel T. Manahan, '58, *'59.

William S. Gardner.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Benjamin S. Ireson,

Enoch Quimby,

John P. Slocum,

Amos H. Foster.

WARD 2.

Henry P. Clough,

Alfred S. Saunders, '49.

Wm. F. Salmon, '58, '59, *President,*

Joseph L. Sargent.

WARD 3.

George Hobson, '59,

Josiah B. Fielding,

Henry P. Perkins,

Hocum Hosford.

WARD 4.

George W. Partridge, '59.

George W. Young, '59,

Morrill M. Bohonan,

Caleb Crosby, '49, '50, '57, '59.

WARD 5.

Josiah G. Peabody, *'50, '59.

Sullivan L. Ward,

George F. Morey.

William H. Lamson.

WARD 6.

William Nichols, '57, '58.

Samuel T. Lancaster,

Charles A. Stott, '59,

Foster Nowell.

GEORGE GARDNER, *Clerk.***1861.****Mayor:**

BENJAMIN C. SARGEANT, '51, †'52, †'56, '57, †'58, †'60.

Aldermen:

Samuel T. Manahan, '58, *'59, *'60.

Jonathan P. Folsom, '56, *'59.

James Watson, '50, '51, *'60.

William G. Morse, '55, '57, *'60,

Hocum Hosford, '60,

Aldis L. Waite.

David Whitney, declined acceptance,

Sager Ashworth, elected in May,

William S. Gardner, *'60.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Frank E. Jewett,

M. Gilbert Perkins,

Jacob Baron,

William D. Blanchard, '59.

WARD 2.

Alfred S. Saunders, '49, '60.

Joseph L. Sargent, '60,

Henry P. Clough, '60,

Henry S. Orange.

WARD 3.William L. North, *President.*

George W. Norris,

Henry P. Perkins, '60,

James G. Morrison.

WARD 4.

Joseph Cater,

Joseph B. Keyes.

Morrill M. Bohonan, '60,

Abel M. Ayer.

WARD 5.

Sullivan L. Ward, '60.

Samuel Beck,

William H. Parker,

George F. Morey, '60.

WARD 6.

Samuel T. Lancaster, '60.

Foster Nowell, '60,

Elon A. Sanborn,

George E. Dana.

GEORGE GARDNER, *Clerk.*

1862.**Mayor:****HOCUM HOSFORD**, '60, * '61.**Aldermen:**

Mertoun C. Bryant.
 Edwin A. Alger, * '58,
 James B. Francis, * '49, * '50,
 William A. Burke.

Isaac F. Scripture.
 Aldis L. Waite, * '61,
 Albert Wheeler, '56, * '58,
 Jona. P. Folsom, '56, * '59, * '61.

JOHN H. MCALVIN, *City Clerk*.**Common Council:****WARD 1.**

Amos D. Wright,
 Frank E. Jewett, '61,
 Horatio G. Burgess,
 Charles F. Hard.

WARD 2.

Benedict O. Carpenter,
 William T. McNeill,
 Lorenzo G. Howe, * '55, * '58, * '60,
 Henry S. Orange, '61.

WARD 3.

George W. Norris, '61,
 Edmund D. Fletcher,
 Everett W. French,
 John Quinn.

WARD 4.

Joseph B. Keyes, '61,
 George Runels,
 John Pettingell,
 Hubbard Willson, '54.

WARD 5.

Rollin C. Downs,
 Albert Mallard, '50, '51,
 Edward Fifield, '51, '52,
 Cleveland J. Cheney.

WARD 6.

Geo. F. Richardson, *President*,
 Albion J. Dudley,
 Elon A. Sanborn, '61,
 Frederick Frye.

GEORGE GARDNER, *Clerk*.**1863.****Mayor:****HOCUM HOSFORD**, '60, * '61, † '62.**Aldermen:**

James B. Francis, * '49, * '50, * '62,
 Edwin A. Alger, * '58, * '62,
 Abiel Pevey, '56, '57, * '58,
 William A. Burke, * '62,

Isaac F. Scripture, * '62,
 Otis Allen, '43, '48,
 Albert Wheeler, '56, * '58, * '62,
 William Nichols, '57, '58, '60.

JOHN H. MCALVIN, *City Clerk*.**Common Council:****WARD 1.**

Charles F. Hard, '62,
 Amos D. Wright, '62,
 John Cosgrove,
 William A. Wright.

WARD 2.

George F. Sawtell,
 Henry S. Orange, '61, '62,
 Hugh McEvoy,
 Nathaniel Stearns.

WARD 3.

Everett W. French, '62,
 Fordyce Coburn, '50, '51,
 Edmund D. Fletcher, '62,
 John Quinn, '62.

WARD 4.

Atwell F. Wright,
 Josiah Gates,
 William Stafford,
 John McCann.

WARD 5.

James C. Ayer,
 Charles W. Saunders,
 Cyrus H. Latham,
 John E. Downs.

WARD 6.

Geo. F. Richardson, † '62. *Pres.*,
 Albion J. Dudley, '62,
 Benedict O. Carpenter, '62,
 Frederick Frye, '62.

GEORGE GARDNER, *Clerk*.

1864.**Mayor:**

HOCUM HOSFORD, '60, * '61, † '62, † '63.

Aldermen:

William S. Southworth,
James B. Francis, * '49, * '50, * '62, * '63.
Dana B. Gove.
William T. McNeill, '62.

George W. Norris, '61, '62.
George Runels, '62.
Cyrus H. Latham, '63.
George F. Richardson, ‡ '62, ‡ '63.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Alden B. Watson,
Lewis L. Perrin,
Frederick S. Tukey,
John Cosgrove, '63.

WARD 2.

George Ripley, *President*,
Andrew F. Jewett,
Artemas S. Young,
Hoyt W. Hilton.

WARD 3.

Samuel N. Wood,
Charles W. Dodge,
Joseph S. Pollard,
James G. Morrison, '61.

WARD 4.

Atwell F. Wright, '63.
Daniel Churchill,
William W. Sherman,
Francis Jewett.

WARD 5.

John E. Downs, '63,
Thos. G. Gerrish, res'd June 14,
Charles Hubbard, '57.
Cleveland J. Cheney, '62.

WARD 6.

Levi Sprague, '59.
Tobias L. P. Lamson,
Addison Putnam,
Albion J. Dudley, '62, '63.

GEORGE GARDNER, *Clerk.***1865.****Mayor:**

JOSIAH G. PEABODY, * '50, '59, '60.

Aldermen:

Ew'd F. Watson, '40, '41, * '44, * '45, * '60,
George W. Norris, '61, '62, * '64,
Dana B. Gove, * '64,
William T. McNeill, '62, * '64,

Henry H. Wilder, '53, '54, * '60,
Josiah Gates, '63,
Cyrus H. Latham, '63, * '64,
William Brown, '45, '46.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

Alden B. Watson, '64,
Lewis L. Perrin, '64,
George N. Osgood,
John R. Southwick, '47.

WARD 2.

George Ripley, † '64, *President*,
Andrew F. Jewett, '64,
Julian V. Keyes,
Chester W. Rugg.

WARD 3.

Joseph S. Pollard, '64,
Charles W. Dodge, '64,
Edward C. Rice,
Frederick T. North.

WARD 4.

Francis Jewett, '64,
Benjamin Walker,
Benjamin L. Googins,
John Pearson.

WARD 5.

Charles Hubbard, '57, '64,
James Kent,
Simieon D. Osterhoudt,
James Foster.

WARD 6.

Tobias L. P. Lamson, '64,
Luke C. Dodge,
Gustavus A. Gerry,
James M. Moore, '55.

GEORGE GARDNER, *Clerk.*

1866.**Mayor:**

JOSIAH G. PEABODY, *'50, '59, '60. + '65.

Aldermen:

Samuel A. Brown,
 Albert B. Plimpton,
 John R. Southwick, '47, '65.
 Joseph L. Sargent, '60, '61,

Charles W. Dodge, '64, '65.
 Josiah Gates, '63, * '65.
 Henry M. Hooke,
 Albion J. Dudley, '62, '63, '64.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

William A. Hodge,
 William A. Wright, '63,
 Jacob Baron, '61,
 Rollin C. Downs, '62.

WARD 2.

Andrew F. Jewett, '64, '65,
 George H. Whitmore,
 Julian V. Keves, '65,
 Chester W. Rugg, '65.

WARD 3.

Edward C. Rice, '65,
 Frederick T. North, '65,
 James N. Pinkham,
 Oliver W. Smith.

WARD 4.

Benjamin L. Googins, '65,
 Alfred Scott,
 Thomas F. Burgess,
 Benjamin Walker, '65.

WARD 5.

Robert H. Butcher,
 John T. Lee,
 George L. Huntoon,
 Jonathan Johnson, '55, * '56, * '57.

WARD 6.

Gustavus A. Gerry, '65, *President*,
 Luke C. Dodge, '65.
 Charles A. Kimball,
 Alfred H. Chase.

GEORGE GARDNER, *Clerk.***1867.****Mayor:**

GEORGE F. RICHARDSON, † '62, † '63, * '64.

Aldermen:

Charles B. Coburn, '44, '51, * '56,
 Hocum Hosford, 60, * '61, † '62, † '63, † '64,
 John R. Southwick, '47, '65, * '66,
 Joseph L. Sargent, 60, '61, * '66,
 Edward C. Rice, '65, '66,

Abner W. Buttrick, '40, '44, '45, '50;
 died June 29, '67.
 Wm. E. Livingston, el. Sept. 9, '67.
 Wm. H. Parker, '61,
 Albion J. Dudley, '62, '63, '64, * '66.

JOHN H. McALVIN, *City Clerk.***Common Council:****WARD 1.**

John Shepard,
 Calvin Sawtell,
 Foster Wilson,
 M. Gilbert Perkins, '61.

WARD 2.

Gustavus A. Gerry, '65, † '66, *President*,
 Ruel J. Walker,
 William Dobbins,
 Silas Tyler, Jr.

WARD 3.

Jona. P. Folsom, '56, * '59, * '61, * '62,
 Frederick T. North, '65, '66,
 Samuel D. Prescott,
 Nathan M. Wright.

WARD 4.

John B. Hunt,
 John Q. A. Hubbard,
 Alfred Scott, '66,
 Thomas F. Burgess, '66.

WARD 5.

George L. Huntoon, '66,
 George S. Cheney,
 James Foster, '65,
 John T. Lee, '66.

WARD 6.

Alfred H. Chase, '66,
 James Lawton,
 John N. Peirce, Jr.,
 Foster Nowell, 60, '61, resigned
 May 14, '67.
 Wm. Kittredge, elected Sept. 9, '67.

GEORGE GARDNER, *Clerk.*

1868.**Mayor:**

GEORGE F. RICHARDSON, †'62, †'63, *'64, †'67.

Aldermen:

| | |
|--|--|
| Charles B. Coburn, '44, '51, *'56, *'67. | Edward C. Rice, '65, '66, *'67, |
| Francis Jewett, '64, '65, | William E. Livingston, *'67, |
| John M. Pevey, resigned in July. | Frederic Frye, '62, '63, |
| Charles L. Hildreth, elected in Sept. | Albion J. Dudley, '62, '63, '64, *'66, |
| Silas Tyler, Jr., '67. | *'67. |

JOHN H. MCALVIN, *City Clerk.*

Common Council:

| | |
|---|---|
| WARD 1. Calvin Sawtell, '67. John Shepard, '67, John F. Merrill, Frederic T. Greenhalge. | WARD 4. William H. Anderson, John Q. A. Hubbard, '67, Charles T. Crane, John B. Hunt, '67. |
| WARD 2. Francis D. Munn, Joseph A. Patten, '55, Ruel J. Walker, '67, Henry S. Orange, '61, '62, '63. | WARD 5. Edwin Lamson, George S. Cheney, '67. William Kelley, Ethan N. Spencer. |
| WARD 3. George W. Badger, Samuel D. Prescott, '67, William Walker, Albert A. Haggett. | WARD 6. John N. Peirce, Jr., '67, James Lawton, '67, Francis Brown, Alfred H. Chase, '66, '67, <i>President.</i> |

GEORGE GARDNER, *Clerk.*

1869.**Mayor:**

JONATHAN P. FOLSOM, '56, *'59, *'61, *'62, '67.

Aldermen:

| | |
|--|---------------------------------|
| Francis Jewett, '64, '65, *'68, | Hapgood Wright, '45, '46, *'56, |
| Henry H. Wilder, '53, '54, *'60, *'65, | John Q. A. Hubbard, '67, '68, |
| Charles L. Hildreth, *'68, | George S. Cheney, '67, '68, |
| Cyrus H. Latham, '63, *'64, *'65. | Charles A. Stott, '59, '60. |

JOHN H. MCALVIN, *City Clerk.* Resigned March 15, 1869.

SAMUEL A. MCPHETRES, *City Clerk.* Elected March 15, 1869.

Common Council:

| | |
|---|--|
| WARD 1. Frederic T. Greenhalge, '68, John H. Durgin, Jr., Patrick Keyes, Benjamin Patch. | WARD 4. William H. Anderson, '68, <i>Pres.</i> , Simeon G. Lyford, Henry P. Carter, Epaphras A. Hill. |
| WARD 2. Joseph A. Patten, '55, '68. Phineas Jones, Francis D. Munn, '68. Amos Sanborn. | WARD 5. William Kelley, '68, Willard A. Brown, William O. Fiske, Edwin Lamson, '68. |
| WARD 3. George W. Badger, '68. Albert A. Haggett, '68, William Walker, '68. George E. Pinkham. | WARD 6. Francis Brown, '68, Alpha B. Farr, '58, Lucian P. Stacy, '55, William Kittredge, '67. |

GEORGE GARDNER, *Clerk.*

1870.**Mayor:****JONATHAN P. FOLSOM**, '56, *'59, *'61, *'62, '67, †'69.**Aldermen:**

| | |
|----------------------------------|---------------------------------------|
| Edward F. Sherman, | Hapgood Wright, '45, '46, *'56, *'69. |
| Frank F. Battles, | John Q. A. Hubbard, '67, '68, *'69. |
| Charles L. Hildreth, *'68, *'69. | Addison Putnam, '64. |
| Amos B. French, | Charles A. Stott, '59, '60, *'69. |

SAMUEL A. MCPHETRES, *City Clerk*.**Common Council:**

| | |
|--|--|
| <p style="text-align: center;">WARD 1.</p> <p>John H. Durgin, Jr., '69. Benjamin Patch, '69. Patrick Keyes, '69. Samuel G. Ladd.</p> <p style="text-align: center;">WARD 2.</p> <p>Phineas Jones, '69. John L. Moulton, Patrick Cummiskey, David G. Skillings,</p> <p style="text-align: center;">WARD 3.</p> <p>Albert A. Haggett, '68, '69, <i>President</i>. Henry P. Perkins, '60, '61. Hocum Hosford, '60, *'61, †'62, †'63, †'64, *'67, declined. Matthew Donovan, John L. Meadowcroft, elected Jan. 24.</p> | <p style="text-align: center;">WARD 4.</p> <p>Epaphras A. Hill, '69. Henry P. Carter, '69. Simeon G. Lyford, '69. Michael Corbett.</p> <p style="text-align: center;">WARD 5.</p> <p>William O. Fiske, '69. Willard A. Brown, '69. James D. Hartwell, Jeremiah Crowley.</p> <p style="text-align: center;">WARD 6.</p> <p>Alpha B. Farr, '58, '69. William Kittredge, '67, '69. Lucian P. Stacy, '55, '69. John Stott.</p> |
|--|--|

GEORGE GARDNER, *Clerk*.**1871.****Mayor:****EDWARD F. SHERMAN**, *'70.**Aldermen:**

| | |
|------------------------------------|------------------------------------|
| Frank F. Battles, *'70, | Albert A. Haggett, '68, '69, †'70, |
| William F. Salmon, '58, '59, †'60, | Henry C. Howe, '53, '54. |
| John W. Smith, '49, '50, | Frederick Ayer, |
| Amos B. French, *'70, | Addison Putnam, '64, *'70. |

SAMUEL A. MCPHETRES, *City Clerk*.**Common Council:**

| | |
|--|---|
| <p style="text-align: center;">WARD 1.</p> <p>John H. Durgin, Jr., '69, '70, Samuel G. Ladd, '70, Francis N. J. Haviland, Joel Knapp.</p> <p style="text-align: center;">WARD 2.</p> <p>William Dobbins, '67, John L. Moulton, '70, Patrick Cummiskey, '70, Amos A. Blanchard.</p> <p style="text-align: center;">WARD 3.</p> <p>Henry P. Perkins, '60, '61, '70, <i>Pres.</i> John L. Meadowcroft, '70, Horace Ela, Julius C. Jockow.</p> | <p style="text-align: center;">WARD 4.</p> <p>Benj. Walker, '65, '66, Michael Corbett, '70, Francis H. Chandler, Charles T. Goddard.</p> <p style="text-align: center;">WARD 5.</p> <p>Jeremiah Crowley, '70. Crawford Burnham, Henry C. Church, Patrick Lynch.</p> <p style="text-align: center;">WARD 6.</p> <p>Leonard Brown, '53, '54, '58, '59, John Stott, '70, Abel T. Atherton, Nathaniel C. Sanborn.</p> |
|--|---|

GEORGE GARDNER, *Clerk*.

1872.**Mayor:**

JOSIAH G. PEABODY, * '50, '59, '60, † '65, † '66.

Aldermen:

| | |
|---------------------------------------|------------------------------------|
| Henry C. Howe, '53, '54, * '71, | Frederick T. North, '65, '66, '67, |
| Alexander G. Cumnock, | Benj. Walker, '65, '66, '71, |
| Benjamin Patch, '69, '70, | William Kelley, '68, '69, |
| Gustavus A. Gerry, '65, † '66, † '67, | Alpha B. Farr, '58, '69, '70. |

SAMUEL A. MCPHETRES, *City Clerk*.**Common Council:****WARD 1.**John E. Webb, '58, '59,
Alonzo F. Caswell,
Southwell Farrington,
True P. Jordan.**WARD 2.**Leonard Brown, '53, '54, '58, '59, '71,
Amos A. Blanchard, '71,
Joseph S. Brown,
Earl A. Thissell.**WARD 3.**Henry P. Perkins, '60, '61, '70, † '71,
Horace Ela, '71, [Pres.
Julius C. Jockow, '71,
Charles F. Tilton.**WARD 4.**Nathaniel P. Favor,
Nathan W. Frye,
Henry A. Lord,
Alonzo L. Russell.**WARD 5.**Crawford Burnham, '71,
Charles F. Belden,
Luther J. Eames,
William Shepard.**WARD 6.**Abel T. Atherton, '71,
Nathaniel C. Sanborn, '71,
Samuel M. Chase,
Julian Talbot.GEORGE GARDNER, *Clerk*.**1873.****Mayor:**

FRANCIS JEWETT, '64, '65, * '68, * '69.

Aldermen:

| | |
|---|--------------------------------------|
| Jonathan P. Folsom, '56, * '59, * '61, * '62, '67, † '69, † '70, | Charles A. F. Swan, elected Jan. 14, |
| George Runels, '62, * '64, | Jacob H. Sawyer, |
| Edward Tuck, * '56, '58, * '59, declin'd, | Jeremiah Crowley, '70, '71, |
| Isaac Farrington, '46, '47, declined, | Alpha B. Farr, '58, '69, '70, * '72, |
| William Dobbins, '67, '71, elec. Jan. 14, | George Stevens. |

SAMUEL A. MCPHETRES, *City Clerk*.**Common Council:****WARD 1.**John E. Webb, '58, '59, '72,
Alonzo F. Caswell, '72,
Frank Brady,
Stephen J. Smiley,**WARD 2.**Joseph S. Brown, '72,
Earl A. Thissell, '72,
Daniel Stickney,
Edward P. Woods.**WARD 3.**Albert A. Haggett, '68, '69, † '70, * '71,
Charles F. Tilton, '72, resig'd Mar. 1,
William Bass,
James Owens,
James A. Loughlin, elected April 8.

[Pres.

WARD 4.Atwell F. Wright, '63, '64,
Nathaniel P. Favor, '72,
Nathan W. Frye, '72,
Henry A. Lord, '72.**WARD 5.**Robert H. Butcher, '66,
Charles F. Belden, '72,
Jared P. Maxfield,
George Smith.**WARD 6.**Nathaniel C. Sanborn, '71, '72,
Samuel M. Chase, '72,
George W. S. Hurd,
Artemas S. Tyler.GEORGE GARDNER, *Clerk*.

1874.**Mayor:**

FRANCIS JEWETT, '64, '65, *'68, *'69, †'73.

Aldermen:

Jeremiah Crowley, '70, '71, *'73,
 Benj. Walker, '65, '66, '71, *'72,
 Alonzo F. Caswell, '72, '73,
 Joseph S. Brown, '72, '73,

Jonathan Kendall, '42, '44, '52,
 George L. Huntoon, '66, '67,
 Nathaniel C. Sanborn, '71, '72, '73,
 George Stevens, *'73.

SAMUEL A. MCPHETRES. *City Clerk.***Common Council:****WARD 1.**

Charles A. Welch, '57,
 Frank Brady, '73,
 Stephen J. Smiley, '73,
 Charles H. Harvey.

WARD 2.

Daniel Stickney, '73,
 Edward P. Woods, '73,
 Charles J. Eastman,
 Edward E. Reed.

WARD 3.

Julius C. Jockow, '71, '72,
 James Owens, '73,
 James A. Loughlin, '73,
 George W. Tilton.

WARD 4.

Charles T. Goddard, '71,
 Nathan W. Frye, '72, '73, *President*,
 Jacob H. Sawyer, *'73,
 Julian A. Richardson.

WARD 5.

Jared P. Maxfield, '73,
 John B. Lyford,
 Samuel P. Marin,
 John Scott.

WARD 6.

George W. S. Hurd, '73,
 Joel A. Abbott,
 Thomas Carolin,
 Jason Fuller.

GEORGE GARDNER. *Clerk*, died May 29.DAVID CHASE, *Clerk*, elected June 4.**1875.****Mayor:**

FRANCIS JEWETT, '64, '65, *'68, *'69, †'73, †'74.

Aldermen:

Benj. Walker, '65, '66, '71, *'72, *'74,
 Jacob Rogers,
 John A. Goodwin,
 Joseph S. Brown, '72, '73, *'74,

Hapgood Wright, '45, '46, *'56, *'69,
 James Owens, '73, '74,
 Alden B. Richardson,
 Samuel A. Chase.

SAMUEL A. MCPHETRES, *City Clerk.***Common Council:****WARD 1.**

Charles A. Welch, '57, '74,
 Charles H. Harvey, '74,
 John F. Howard,
 John W. Welch.

WARD 2.

Earl A. Thissell, '72, '73,
 Edward E. Reed, '74,
 William A. Read,
 Leavitt R. J. Varnum.

WARD 3.

Albert A. Haggett, '68, '69, †'70, *'71,
 George W. Tilton, '74, [†'73, *Pres.*,
 Charles Cowley,
 Thomas R. Garity.

WARD 4.

Josiah Butler,
 Francis Carll,
 Edward P. Dennis,
 Edward Stockman.

WARD 5.

James D. Hartwell, '70,
 John B. Lyford, '74,
 Orford R. Blood,
 Charles W. Sleeper.

WARD 6.

Joel A. Abbott, '74,
 Thomas Carolin, '74,
 Jason Fuller, '74,
 Albert D. Wright.

DAVID CHASE, *Clerk.*

1876.

Mayor:

CHARLES A. STOTT, '59, '60, *'69, *'70.

Aldermen:

| | |
|--|-------------------------|
| Jacob Rogers, *'75, | Henry A. Hildreth, |
| John A. Goodwin, *'75, [†'73, †'75, | George E. Stanley, |
| Albert A. Haggett, '68, '69, †'70, *'71. | Francis Carll, '75, |
| Charles F. Belden, '72, '73, | William H. Wiggin, '57. |

SAMUEL A. McPHETRES. *City Clerk.***Common Council:****WARD 1.**

John W. Welch, '75,
 Lewis Stiles,
 Daniel W. Manning,
 David M. Collins, '56, declined,
 John F. Howard, '75, elected Jan. 11.

WARD 2.

Leavitt R. J. Varnum, '75,
 Charles E. Hallowell,
 Charles Callahan,
 William A. Read, '75.

WARD 3.

Charles Cowley, '75,
 Charles H. Kimball,
 Charles Runels,
 James Howard, died after election.
 William H. Grady, elected Jan. 11.

WARD 4.

Edward Stockman, '75, res. May 23,
 Gardner W. King,
 Stephen H. Jones,
 Charles D. Starbird,
 James W. Bennett, elected June 22.

WARD 5.

Orford R. Blood, '75,
 John F. Kimball, *Pres. from* May 23,
 Charles H. Hanson,
 M. Gilbert Perkins, '61, '67.

WARD 6.

Edwin Sanborn,
 Benjamin C. Dean, *Pres. res* May 23,
 Charles H. Walker,
 John J. Pickman,
 Willis Farrington, elected June 22.

DAVID CHASE, *Clerk.*

1877.

Mayor:

CHARLES A. STOTT, '59, '60, *'69, *'70, †'76.

Aldermen:

| | |
|---|--|
| Jeremiah Crowley, '70, '71, *'73, *'74, | Orford R. Blood, '75, '76, seat vacated, |
| Horace R. Barker, | Stephen B. Puffer, dec. el. Jan. 2, |
| George E. Stanley, *'76, | Robert Park, |
| Charles H. Kimball, '76, | George E. Pinkham, '69. |
| George P. Walker, | |

SAMUEL A. McPHETRES, *City Clerk.***Common Council:****WARD 1.**

Daniel W. Manning, '76,
 Lewis Stiles, '76,
 John Courtney,
 Frank Brady, '73, '74, res. March 27,
 Jared P. Maxfield, '73, '74, elec. May 8.

WARD 2.

Charles E. Hallowell, '76,
 Francis D. Munn, '68, '69,
 Charles H. Robbins,
 Oliver M. Harding.

WARD 3.

William H. Grady, '76,
 Patrick Lynch,
 Simon Kelly,
 George E. Davis.

WARD 4.

Gardner W. King, '76,
 James W. Bennett, '76,
 Irving K. Goodale,
 Orlando Blodgett.

WARD 5.

John F. Kimball, †'76,
 Charles H. Hanson, '76,
 Peter S. Coburn,
 Robert Goulding.

WARD 6.

Edwin Sanborn, '76,
 John J. Pickman, '76,
 Charles H. Walker, '76,
 Augustus E. Spaulding, d. Jan. 10,
 George S. Cushing, elected Feb. 6.

DAVID CHASE, *Clerk.*

1878.**Mayor:****JOHN A. G. RICHARDSON.****Aldermen:**

Stephen B. Puffer, * '77,
 Robert Park, * '77,
 Horace R. Barker, * '77,
 George F. Scribner, '57,

George E. Scripture,
 Joseph S. Pollard, '64, '65, [* '77,
 Jeremiah Crowley, '70, '71, * '73, * '74,
 Nathaniel C. Sanborn, '71, '72, '73, * '74.

SAMUEL A. MCPHETRES, *City Clerk.***Common Council:****WARD 1.**

John Courtney, '77,
 John J. Mealey,
 Joseph M. Ambrose,
 Charles H. Harvey, '74, '75.

WARD 2.

Oramel A. Brigham,
 Edward M. Tucke,
 William W. Clark,
 Albert W. Monty.

WARD 3.

Simon Kelly, '77,
 Edward Cawley,
 Henry P. Morris,
 Samuel D. Butterworth.

WARD 4.

Irving K. Goodale, '77,
 Orlando Blodgett, '77,
 Robert G. Bartlett,
 Stephen H. Jones, '76.

WARD 5.

Robert Goulding, '77,
 Peter S. Coburn, '77,
 John F. Kimball, † '76, † '77, *Pres.*,
 Enos O. Kingsley, '56.

WARD 6.

George S. Cushing, '77,
 Eli W. Hoyt,
 Luke B. Taylor,
 Miles F. Brennan, to Jan. 22,
 Thomas Nesmith, from Jan. 22.

DAVID CHASE, *Clerk.***1879.****Mayor:****JOHN A. G. RICHARDSON, † '78.****Aldermen:**

Horace R. Barker, * '77, * '78,
 Charles A. R. Dimon,
 Joseph S. Pollard, '64, '65, * '78,
 Charles S. Lilley,

George E. Scripture, * '78.
 George F. Scribner, '57, * '78,
 Charles F. Howe,
 Robert Goulding, '77, '78.

SAMUEL A. MCPHETRES, *City Clerk.***Common Council:****WARD 1.**

Joseph M. Ambrose, '78,
 John O'Donnell,
 James Kelly,
 Richard J. Noonan.

WARD 2.

Albert W. Monty, '78,
 Charles H. Richardson,
 William K. Chase, res. Nov. 25,
 Edwin A. Robinson,
 Edward M. Tucke, '78, elect. Dec. 9.

WARD 3.

Edward Cawley, '78,
 Henry P. Morris, '78,
 William T. Benson,
 Patrick A. Rogers.

WARD 4.

Robert G. Bartlett, '78,
 Fred Woodies,
 Charles F. Varnum,
 Charles E. Farrington.

WARD 5.

Albert W. Burnham,
 Ambrose L. Ready,
 Joseph M. Wilson,
 Edward B. Peirce, *Pres.*

WARD 6.

Eli W. Hoyt, '78,
 Luke B. Taylor, '78,
 Major A. Shaw,
 Miles F. Brennan, '78.

DAVID CHASE, *Clerk.*

ORDINANCES
OF THE
CITY OF LOWELL,
PASSED SINCE
DECEMBER 29, 1876.

ORDINANCES.

No. 1.

AN ORDINANCE TO AMEND SECTION 11 OF CHAPTER XVI OF THE ORDINANCES.

Be it ordained by the City Council of the City of Lowell, as follows:

That Section 11, of Chapter xvi, of the Ordinances of the City of Lowell, be and the same is hereby amended, by adding the following words at the end of said Section:

No person not licensed as aforesaid shall employ or use any wagon, cart, truck, sleigh, sled or other vehicle which may be necessary for the conveyance from place to place within the city, for hire, of any wood, coal, lumber, stone, brick, sand, gravel, clay, dirt, rubbish, goods, wares, furniture or merchandise.

Approved November 13, 1877.

No. 2.

AN ORDINANCE AMENDING AN ORDINANCE.

Be it ordained by the City Council of the City of Lowell, as follows:

That the last two lines except the first word in said lines in Section 11, Chapter 16th, be stricken out, and the following lines inserted, viz:

The west side of the west end of Jackson Street, from the head of said street to the branch track of the Boston & Lowell Railroad.

Approved December 26, 1877.

No. 3.

AN ORDINANCE FIXING THE TIME FOR ESTABLISHING SALARIES.

Be it ordained by the City Council of the City of Lowell, as follows:

The salaries and compensation of city officers shall be established in the month of February or March in each year, after the year 1878, and any change made in any existing salary shall take effect upon the first day of April following; and no change of salaries shall be allowed in any year after the passage of the resolution establishing the same for that year; and the salaries or compensation fixed for the payment of the said officers, shall be in full for all services performed by them by virtue of their offices; and all sums of money by them received from any and every source, in discharge of said services during any quarter of the fiscal year, shall at the expiration of said quarter be by them paid over or accounted for to the City Treasurer.

Section 7, of Chapter 23, of the Ordinances, is hereby repealed.

Approved December 27, 1877.

No. 4.

AN ORDINANCE TO AMEND CHAPTER TWENTY-THREE OF THE REVISED ORDINANCES.

Be it ordained by the City Council of the City of Lowell, as follows:

That in the second paragraph of Chapter Twenty-three, the following words be stricken out:

“No Assessor of Taxes shall assess in the same ward for more than two consecutive years.”

Approved March 19, 1878.

No. 5.

AN ORDINANCE TO AMEND CHAPTER XVI OF THE ORDINANCES.

Be it ordained by the City Council of the City of Lowell, as follows:

Chapter Sixteen, of the Ordinances of the City of Lowell, is hereby amended, as follows:

In Section 9, by striking out in the third and fourth lines the words, “The east side of Dutton Street, from Market to Merrimack

Street," and inserting in place thereof the words, "The north side of Merrimack Street, from Anne to Dutton Street," and

In Section 11, by striking out the words, "Market" and "Pawtucket" in the eighteenth line, and inserting in place thereof the words, "Merrimack" and "Western," provided, however, that the number of carriages or vehicles allowed positions on the stands named in this Ordinance shall be limited so as not to interfere with public travel or safety, or with persons having business at the Merrimack Street Depot, and the City Marshal is hereby authorized to limit the number of carriages or vehicles allowed places on said stands or any part thereof.

Approved May 28, 1878.

No. 6.

AN ORDINANCE TO AMEND CHAPTER FIFTEEN OF THE REVISED ORDINANCES.

Be it ordained by the City Council of the City of Lowell, as follows:

That Section Two of Chapter Fifteen of the Ordinances shall not apply to the land lying south of and adjoining Church Street between the Lowell & Andover Railroad and Concord River.

Approved June 25, 1878.

No. 7.

AN ORDINANCE TO AMEND CHAPTER FORTY-ONE OF THE REVISED ORDINANCES.

Be it ordained by the City Council of the City of Lowell, as follows:

That Section Twenty of Chapter Forty-one of the Revised Ordinances of the City of Lowell, be amended in the paragraph relating to the rate to be charged for water for steam engines, by striking out the word "five," and inserting instead thereof the word "four."

Approved July 27, 1878.

No. 8.

AN ORDINANCE TO AMEND THE ORDINANCES RELATING TO THE BURIAL OF THE DEAD.

Be it ordained by the City Council of the City of Lowell, as follows:

SECTION 1. Section 2 of Chapter 2 of the Revised Ordinances of the City of Lowell is hereby amended by striking out the words

"Superintendent of burials," and inserting in place thereof the words "City Clerk."

SECT. 2. It shall be the duty of undertakers or other persons having charge of the burial of bodies of deceased persons brought into the City of Lowell and buried therein, to return to the City Clerk within one week after such burial the facts relating to such dead body, so far as they can be ascertained, required to be returned to the City Clerk by Section 8 of Chapter 2 of the Revised Ordinances of said City, and said Clerk shall record such facts in a book to be kept for that purpose.

SECT. 3. Whenever a body shall be removed from the place of the original or any subsequent interment to another place in the City, or shall be removed from the City, the undertaker or other person having charge of such removal shall within one week thereafter notify the City Clerk in writing, giving the name of the person whose body has been removed and the places where the body was removed from and to, and the City Clerk shall make a note to the original record or correct the same in such manner as to indicate the place of the latest interment.

Approved February 18, 1879.

No. 9.

AN ORDINANCE TO AMEND CHAPTER THIRTY-FOUR OF THE REVISED ORDINANCES OF THE CITY OF LOWELL, RELATING TO THE SUPERINTENDENT OF PUBLIC SCHOOLS.

Be it ordained by the City Council of the City of Lowell, as follows:

Section One of Chapter Thirty-four of the Revised Ordinances of the City of Lowell is hereby amended by striking out the words "January or February" wherever they occur in said Section, and inserting in place thereof the words "July or August."

Approved March 11, 1879.

No. 10.

AN ORDINANCE ESTABLISHING A FREE DISPENSARY FOR THE RELIEF OF THE SICK POOR OF THE CITY OF LOWELL.

Be it ordained by the City Council of the City of Lowell, as follows:

SECTION 1. The Board of Overseers of the Poor shall, as soon as may be after the passage of this Ordinance, provide two or more

suitable rooms, located in a central part of the city, to be used as a Dispensary for the purpose of furnishing medicines and medical and surgical treatment free to the sick poor of the city of Lowell. Said rooms shall be suitably furnished and arranged for consulting and operating rooms, and for keeping and dispensing drugs and medicines as herein provided.

SECT. 2. Said Overseers of the Poor shall cause to be procured and kept for use in said rooms, such drugs, medicines, chemicals, and surgical appliances as may be necessary for the purpose for which said Dispensary is established, provided that the whole expense of said rooms, including rent, furniture, fixtures, medicines, and all other articles provided therefor, and the salary of the clerk to be employed therein, shall not exceed the sum of one thousand dollars per annum.

SECT. 3. Said Overseers of the Poor shall, as soon as may be after the passage of this Ordinance, and during the month of January in each year thereafterwards, appoint a board of twelve consulting physicians, members of the Middlesex North District Medical Society, who shall serve, without compensation, for the term of one year, commencing on the first Monday of February next following their appointment, excepting the Board of Physicians appointed for the current year, whose term of office shall expire on the day preceeding the first Monday of February, in the year eighteen hundred and eighty. Said Board of Physicians shall organize on the first Monday of February in each year, and choose one of its members as Chairman. It may make such rules and regulations for its own Government; the management of said rooms; the treatment of patients; the dispensing of medicines, and all other matters relating thereto, as it may deem expedient, subject to the approval of said Overseers of the Poor, who may at any time annul, alter, or amend, said rules and regulations.

SECT. 4. Said Overseers of the Poor shall, as soon as may be after the passage of this Ordinance, and on the first Monday of February in each year thereafterwards, appoint a competent clerk, subject to the approval of the Board of Physicians, whose term of office shall be the same as that of said Board of Physicians, to remain at said rooms during such time as said Board of Physicians, or the Overseers of the Poor, shall require. Said clerk shall compound and dispense such medicines as may be regularly prescribed, and perform such other services connected with said Dispensary as may be required. The compensation of said clerk shall be fixed by the

Overseers of the Poor. All vacancies in said Board of Physicians, or in said office of clerk, may be filled at any time by said Overseers of the Poor, in the same manner, and subject to the same restrictions, as herein provided for their appointment, and said clerk or any member of said Board of Physicians may be removed at any time by said Overseers of the Poor for cause.

SECT. 5. Said rooms shall be kept open for receiving patients and dispensing medicines at least two hours in each day, excepting Sundays, and at such other times as said Board of Physicians or the Overseers of the Poor shall determine. During the time said rooms are kept open, some member of said Board of Physicians shall be present and furnish such medical and surgical treatment to patients as may be required under the rules and regulations of said Board and of the Overseers of the Poor.

SECT. 6. Any physician residing and practising in said Lowell, who may be called upon to prescribe medicines for sick persons who are residents of said city, and shall find that such persons are unable to pay for such medicine and medical attendance, may send prescriptions for such persons to said Dispensary, and the medicines prescribed shall be furnished therefrom free of charge, provided that the prescription therefor shall contain the name and residence of such sick person, the name of the prescribing physician, and, excepting those of the City Physician, shall be countersigned by one of said consulting physicians, or by the Secretary of the Board of Overseers of the Poor. All such prescriptions shall be preserved by said clerk, and recorded in a book to be kept for that purpose.

SECT. 7. Any resident of the City of Lowell needing such medical or surgical treatment as may be provided at said rooms, and who is unable to pay for the same, may apply therefor in person at said Dispensary, and shall receive medical and surgical treatment therein free of charge, subject to the rules and regulations thereof.

SECT. 8. The Overseers of the Poor shall in the month of December annually make a detailed report to the City Council, of their management of said Dispensary, the receipts and expenditures thereof, the number of patients and character of the diseases treated therein, and such other facts as may be necessary to a full understanding of the condition, benefits and management of the same. And such report shall be accompanied with such parts of the report of said Board of Consulting Physicians as may be deemed advisable.

Approved June 10, 1879.

No. 11.

AN ORDINANCE RELATING TO WARRANTS FOR CALLING MEETINGS
OF THE CITIZENS.

Be it ordained by the City Council of the City of Lowell, as follows :

The form of warrants for calling meetings of the citizens of the several wards, as prescribed in Chapter Forty of the Revised Ordinances of the City of Lowell, may be varied by the Mayor and Aldermen, so far as it may be necessary to distinguish in said warrants between the class of citizens allowed by law to vote for all officers or propositions at any election, and the class who are allowed to vote only for a portion of the officers or propositions at such election.

Approved November 11, 1879.

No. 12.

AN ORDINANCE TO AMEND CHAPTER 41 OF AN ORDINANCE
CONSOLIDATING AND ESTABLISHING THE ORDINANCES OF
THE CITY OF LOWELL.

Be it ordained by the City Council of the City of Lowell, as follows :

SECTION 1. Section 11 of Chapter 41, relating to Water Works, is hereby amended by striking out all of said section and inserting in place thereof the following, to wit: The annual rent for the use of the water shall be made up and assessed to the owners of estates having a service pipe, and not using metered water, on the first day of March in each year, for the year commencing the first day of April succeeding said assessment, and the rates so assessed shall be due and payable in advance on the first day of May following.

No abatements shall be made for vacancies in houses or tenements, unless such vacancies shall be of two or more consecutive months duration, due notice thereof having been given the Water Board at the beginning of said vacancies, or for a less number of persons occupying any premises, after the annual assessment in March.

All charges for specific supplies, or for any 365th part of a year, shall be payable in advance, and before the water is let on.

SECT. 2. Section 12 of Chapter 41 is hereby amended by striking out the word "sixty" in the second line, and inserting in place thereof the word "thirty."

SECT. 3. Section 13 of Chapter 41 is hereby amended by striking out the words "the Superintendent, under the direction of."

SECT. 4. Section 20 of Chapter 41 is hereby amended by striking out the first twelve lines, and inserting in place thereof the words: "The following rates shall be charged annually for the use of the water from and after the first day of April in the year eighteen hundred and eighty, and *pro rata* for any 365th part of a year:

For a family not exceeding six persons, six dollars. Families of more than six persons shall pay fifty cents for each additional person above six." And by striking out the fortieth and forty-first lines and inserting in place thereof the following words: "Steam boilers in dwellings for heating purposes shall be assessed one dollar each; for blocks and public buildings, two to five dollars each building." And by adding the following words to the 65th line, "Which shall be assessed upon the owner of the premises where such lime or cement is used."

And by adding after the 95th line the following words, "Blacksmiths: for first forge, three dollars; for each additional forge, one dollar and fifty cents."

"Billiard saloons: for first table, three dollars; for each additional table, one dollar and fifty cents."

"Club rooms: not less than three dollars, nor more than twenty dollars."

And by striking out from line 102, after the word "services," the following words, "New service shall be charged one family rate at least, and one year from the time such service is put in, whether the water is taken or not."

And by striking out all of the words, in said Section 20, after the word "meters" in line 112, and inserting in the place thereof the following words: "After the first day of April, persons charged for the use of water at the annual rates, shall not be allowed to change from annual to metered rates; provided, however, that prior to the first day of March in each year, all water-takers who desire to pay metered, instead of annual rates, may apply to the Water Board for a meter to be placed within their premises on the first day of April following. Said meter shall be furnished and set by the City of Lowell, and the expense thereof shall be paid by the person making application therefor, within thirty days from the time the meter is set; the said city to remain the owner of said meter until the expense of the same is paid.

The charge for metered water shall be fixed and determined by

the Water Board, and bills shall be made payable quarterly on the first days of January, April, July, and October, and if not paid in thirty days after the same are due, the water shall be shut off in accordance with the provisions of Section 12. The Water Board shall have the power to ascertain by meter the quantity of water used in any case, and when in any case the quantity used shall be ascertained and measured by meter, the Water Board may charge for measured water or establish a water rate therefor instead of the specific rate hereinbefore established.

If a meter gets out of order and fails to register, the consumer may be charged at the average daily consumption, as shown by the meter when in order. Repairs of meters may be made by the Water Board, at the expense of the owners, whenever the Water Board deem repairs necessary, and no meter shall be moved or disturbed without permission from the Superintendent of the Water Works. In no case where a meter is set shall the annual charge be less than twelve dollars, which minimum annual charge shall be payable in advance, in all cases where the first quarterly reading of said meter does not indicate such an amount of water used."

Approved February 3, 1880.

NO. 13.

AN ORDINANCE RELATING TO THE BOARD OF HEALTH.

Be it ordained by the City Council of the City of Lowell, as follows:

SECTION 1. The Board of Health of the City of Lowell shall consist of two persons, not members of the City Council, and the City Physician, *ex-officio*, and shall have all the powers and duties assigned to Boards of Health by the Statutes of the Commonwealth. The Mayor and Aldermen shall, in the month of January in each year, appoint one person to serve as a member of said Board for the term of two years, commencing on the first Monday of February then next ensuing. The members so appointed shall be subject to removal at any time by the Mayor for cause; and all vacancies occurring in said board shall be filled by the Mayor, with the approval of the Board of Aldermen. The members so appointed shall receive such compensation as the City Council shall from time to time determine. Said Board shall organize on the first Monday in February, in each year, by the choice of one of its members as

Chairman, and may at any time choose a Clerk, not a member of the Board, and make such rules and regulations for their own government, and the government of all subordinate officers in its own department, as it may deem necessary.

SECT. 2. The Board of Health may make all regulations which they may deem necessary in regard to the removal and abatement of filth, rubbish, nuisances, and causes of diseases, and shall have power to require the aid and assistance of such agents as may be needed to enforce such regulations; and may fix their compensation and the compensation of the Clerk before mentioned, provided that the whole amount of such compensation shall not exceed the sum appropriated therefor by the City Council.

SECT. 3. It shall be the duty of the City Marshal, subject always to the direction, authority, and control of the Board of Health, to carry into execution all the ordinances and rules made by the City Council relative to causes of sickness, nuisances, and sources of filth that may be injurious to the health, or may affect the comfort of the inhabitants of the city; and to cause all such nuisances, sources of filth, and causes of sickness to be removed, destroyed, or prevented, as the case may require, conformably to such ordinances and rules and the laws of the Commonwealth.

SECT. 4. When there is a main drain or common sewer in any street, highway, passageway, or alley, every owner of land adjoining such street, highway, passageway, or alley shall make a sufficient drain from his house, yard, or lot, to such sewer, and shall cause all waste water to be conducted through the same to said main drain or common sewer, and no person shall suffer any waste or stagnant water to remain in any cellar or upon any lot or vacant grounds by him owned or occupied.

SECT. 5. When the Board of Health shall be satisfied that any tenement, used as a dwelling-house, is not furnished with a sufficient drain, privy, and vault, or either of them, they shall give notice in writing to the owner or his agent, requiring that a suitable drain, privy, and vault, or either of them, be constructed within such time as they shall appoint; *provided*, that notice to non-resident or unknown owners may be given by advertising in some public newspaper published in Lowell. And in case such requisition be not complied with, the Board shall cause such drain, privy, and vault, or either of them, to be constructed, and the expense thereof shall be charged to such owner or agent.

SECT. 6. Whenever the Board of Health shall find that the num-

ber of persons occupying any tenement is so great as to be the cause of nuisance or sickness, or a source of filth; or whenever any tenement is not furnished with a suitable privy, vault, and drain underground, according to the provisions of this chapter, the Board may cause all or any persons occupying such tenement to be removed therefrom, first giving them notice in writing to remove, and allowing them the space of at least forty-eight hours in which to comply with said notice.

SECT. 7. Hereafter all privy vaults shall be made of brick and cement, and contain at least eighty cubic feet, and shall be so constructed that the inside of the same shall be at least two feet distant from the line of every adjoining lot, unless the owner of such lot shall consent and agree otherwise, and also two feet from every street, lane, passageway, or public place; and every vault shall be made tight, and its contents shall never be within two feet of the surface of the ground about the same. And whenever any privy or vault shall become offensive, the same shall be cleansed. And in case the condition or construction of any vault or privy shall be different from the requirements of this section, the Board of Health may cause the same to be cleansed, repaired, amended, altered, or removed, and shall charge all the expense incurred in so doing to the owner, or party occupying the estate in which such privy or vault may be; *provided*, they shall first notify such owner or party occupying, in the manner provided in the fifth section of this chapter; and allow the space of at least forty-eight hours for such owner or occupant to comply with such notice.

SECT. 8. No privy or vault shall be opened without permission of the Board of Health, nor in any other mode nor at any other time than such as the Board of Health may direct, and no person shall remove the contents of any vault or privy, except in a water-tight cart or wagon, the owner or driver of which shall be licensed therefor, upon such terms and regulations as the Board of Aldermen prescribe, and no person owning or driving such cart or wagon shall cause or permit the same to enter, stand in, or proceed through any of the streets, lanes, or public places of the city, at any other time than between the hours of ten o'clock, P. M., and four o'clock, A. M., except by written permission of the Board of Health.

SECT. 9. Whenever it shall appear to the Board of Health that any cellar, lot, or vacant land within the city has become a nuisance, or so situated that it may probably become dangerous to the public health, they may cause the same to be drained, filled up, or other-

wise prevented from becoming or remaining a nuisance or a cause of sickness; and shall charge all reasonable expenses incurred in so doing to the several owners or parties occupying such cellar, lot, or vacant land; *provided*, notice shall have been first given as provided in the fifth section of this chapter, and the space of forty-eight hours thereafter allowed.

SECT. 10. No person shall remove or carry through any street, alley, or public place in the city, any house dirt, offal, filth, rubbish, contents of any privy or vault, or waste matter of any kind, from any dwelling-house or other place, unless the owner or driver of the cart, wagon, or other conveyance in which the same be carried, shall be licensed for such purpose by the Board of Aldermen.

SECT. 11. No person shall cast any vegetable or dead animal substance into any street, lane, passageway, cesspool, or sewer, nor into any of the wells, cisterns, reservoirs, ponds, canals, or waters within the city, nor cause any animal to be drowned in said waters. Nor shall any person place, sweep, or deposit any dirt, sawdust, soot, ashes, cinders, shreds, shavings, hair, manure, oyster or lobster shells, or any rubbish, offal, or filth of any kind, in or upon any public highway, street, sewer, sidewalk, court, passageway, or public place, without a written license from the Board of Health.

SECT. 12. No person shall bring into the city for sale, nor offer for sale, any diseased, unwholesome, stale, or putrid meat, fish, or other article of provisions, nor any fish, except fresh salmon and shad, and except smelts and other small fish, that shall not first have been cleansed of their entrails and refuse parts.

SECT. 13. All house dirt, rubbish, filth, and waste matter that may be collected in any house or warehouse, or on private property in the city, shall, when ordered by the Board of Health, be carried away therefrom, under the direction of the City Marshal, by and at the expense of the owner or occupant of such house, warehouse, or other private property, and removed to such place as may be directed by the Marshal as aforesaid, within twenty-four hours after such order. And the City Marshal, when ordered by the Board of Health, shall, at any time between sunrise and sunset, enter into any building or other place in the city, for the purpose of examining into, destroying, removing, or preventing any nuisance, source of filth, or cause of sickness therein. And in case such entrance be opposed, he shall make known such opposition to the Board of Health, in order that a warrant may be obtained to enforce the same, as provided by law.

SECT. 14. No person shall remove any manure, or cause or suffer

the same to be removed, between the first day of May and the first day of November, except between the hours of twelve o'clock at night and two hours after sunrise, without a permit therefor from the Board of Health.

SECT. 15. No fowls, swine, or goats shall be kept within the limits of the city, without the license of the Board of Health, and only in such place and manner as they may direct.

SECT. 16. It shall be the duty of the City Marshal to keep an exact account of all costs, outlays, and expenses that may be incurred in carrying into effect any of the purposes and provisions set forth or contained in the fifth, seventh, and ninth sections of this chapter, and without delay to report the same to the Auditor of Accounts, with the names of the various persons to whom they may be chargeable, and the proportion or amount payable from each person. And the Auditor shall examine, correct, and charge the same in his books, and without delay make out bills therefor, and place said bills in the hands of the City Treasurer for collection.

SECT. 17. Any person who shall offend against any of the provisions of this chapter shall forfeit and pay for each offence a sum not exceeding twenty dollars.

SECT. 18. All ordinances or parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed.

SECT. 19. This ordinance shall take effect upon its passage.

Approved March 9, 1880.

NO. 14.

AN ORDINANCE PROVIDING FOR THE PAYMENT OF THE CITY DEBT.

Be it ordained by the City Council of the City of Lowell, as follows:

SECTION 1. All sums of money hereafter received from the Commonwealth of Massachusetts, on account of corporation tax or national bank tax, or from the credits standing to the account of abatement of taxes, shall, until Jan. 1, 1896, be placed to the credit of a "fund for the reduction of the ordinary city debt," which becomes due in the years 1880 to 1895, inclusive.

SECT. 2. Said sums of money, when received, shall be invested by the Commissioners of Sinking Funds, and with the accumulations of interest shall be held for the payment of the said city debt, as it becomes due in each year, as aforesaid, and shall be used for no other purpose.

Approved April 13, 1880.

ORDINANCE

RELATING TO THE

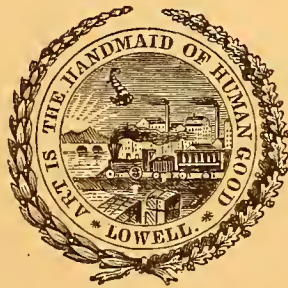
LOWELL WATER WORKS,

(NOW IN FORCE)

AS AMENDED

JULY 27, 1878, AND FEB. 3, 1880.

PRINTED MAY, 1880.



LOWELL, MASS.:
VOX POPULI PRESS: HUSE, GOODWIN & CO.
1880.

ORDINANCE RELATING TO WATER WORKS,*

[AS AMENDED.]

SECTION

1. Water board.
2. Organization of waterboard.
3. Powers of water board.
4. Report.
5. Power to convey property.
6. Bills to be certified, &c.
7. Duties of president.
8. Duties of superintendent.
9. Assessment of water rates,
&c.
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11. Time of payments.
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SECTION

14. Members of water board to
be disinterested.
15. Interference with water
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18. Waste of water.
19. Water board to make regu-
lations.
20. Water rates.
21. Water used by city
22. Police to report leakage.
23. Sinking fund.
24. Payment of water bonds.

SECTION 1. There shall be chosen annually, in the month of January, by concurrent vote of both branches of the city council, one member of the board of aldermen and two members of the common council, to be members of the Lowell water board, to hold office during the remainder of the municipal year in which they are elected, and until others are elected in their place.

Water board.
114 Mass. 334.
119 Mass. 174,
375.
117 Mass. 76.

In the month of March or April, annually, there shall be chosen by concurrent vote of both branches of the city council, one member of the Lowell water board from the citizens at large, to hold his office for two years from the first Monday in May in the year of his election, and until another is elected in his place. Said members elected

* See "Acts and Ordinances relating to the Lowell Water Works, with the agreement of the settlement of the claims for damages," printed in 1876.

from the city council and the citizens at large shall at all times be subject to removal from office by the city council. Vacancies may be filled at any time for the unexpired term, in the same manner as the original appointment.

In the month of March or April, annually, there shall be chosen by concurrent vote of both branches of the city council, a superintendent of water works, to hold his office from the first Monday in May in the year of his election and until another is elected in his place, unless sooner removed.

Organization of
water board.

SECT. 2. The persons elected from the city council shall enter upon their duties as members of said water board forthwith; and the persons elected from the citizens at large shall enter upon their duties on the first Monday in May. On the first Monday in May, annually, the members shall meet and organize themselves into a board, by the choice of one of their number as president. They shall also choose a clerk, who shall not be a member of the board; and they may make such rules and regulations for their own government, and for the government of all subordinate officers by them appointed, as they may deem expedient, not inconsistent with the statute law or city ordinances.

Powers of
water board.

SECT. 3. The Lowell water board shall have and exercise all the powers vested in the city council by an act of the Legislature of Massachusetts, passed on the twenty-first day of May, in the year eighteen hundred and fifty-five, entitled "An act for supplying the city of Lowell with water," and by any acts in addition thereto, so far as the same can be legally delegated; and they shall more especially have the power to appoint all necessary subordinate officers, agents and assistants, and to remove the same at pleasure, and may fix their compensation, and the compensation of the clerk before mentioned; *provided*, that the same shall not exceed in the whole the sum appropriated therefor by the city council; but all the powers mentioned in this section shall be subject to any limitations and restrictions contained in the ordinances, regulations and orders of the city council. The superintendent and clerk shall be residents of Lowell.

SECT. 4. The Lowell water board shall annually, on ^{Annual report.} or before the second Monday in January, present to the city council a report containing a statement of the condition of the water works, and of the land and other property connected therewith, with an account of all receipts and expenditures, together with any information or suggestion which they may deem important, and at the same time transmit to the city council the report of the superintendent.

SECT. 5. The water board are authorized to sell or ^{May convey} lease such of the property connected with the water ^{property.} works as they may deem expedient, subject to the approval of the mayor. All deeds and leases shall be executed by the mayor and countersigned by the president of the board.

SECT. 6. All bills for expenditures by the water ^{Bills.} board shall be certified by the president, examined by the auditor, and approved by the committee on accounts, before they are paid by the treasurer.

SECT. 7. The president of the water board shall ^{Duties of president.} exercise a general supervision over the water works, and the materials and property connected therewith, and over all subordinate officers and agents. In case of his absence or inability, his duties may be performed by a president *pro tempore*, to be chosen by the said board. The members of the board, chosen from the citizens at large, shall receive such compensation for their services as the city council may determine.

SECT. 8. The superintendent shall take charge of the ^{Duties of} aqueducts, lands, reservoirs, and other works and ^{superintend'nt.} property connected with the water works, as the water board may from time to time direct; and he shall perform all such services in relation thereto as may be required of him by said water board. He shall, on or before the fifth day of January, annually, present to the water board a report of the general condition of the water works, with a detailed statement of all expenditures in his department, and such other matters as he or the said board may deem expedient.

SECT. 9. The water board shall determine and assess ^{Assessment of} the water rates according to section twenty of this ordi- ^{water rates.}

nance, and whenever requested by the city council, shall prepare and send to the city council a schedule of their assessments of water rates, and the superintendent thereof shall, at least once in each year, visit the premises of every person who takes the water; shall exercise a constant supervision over the use of the water, and attend to the enforcement of all regulations relating thereto. He shall make out and distribute all bills for the same, and on or before the tenth day of January, annually, shall present to the board a report, containing a statement of the number of water-takers, the number of cases where the water has been cut off, the number and amount of abatements, the expenditures in his department, and such other matters as he or the said board may deem expedient. He shall keep suitable books, in which shall be entered the names of all persons who take the water, the kind of building, the name and number of the street, the nature of the use, the number of taps, and the amount charged, which shall be always open to the inspection of the water board, and any committee of the city council. He shall perform such other services as may be required of him by the water board.

Payment of
water rates.

SECT. 10. All moneys due the city on account of water works, shall be paid to the city treasurer, and the same shall be placed to the credit of the water department, to which use they shall be exclusively appropriated, and shall not be paid out except as provided in section six.

Time of assess-
ment and pay-
ment of water
rates.

SECT. 11. The annual rent for the use of the water shall be made up and assessed to the owners of estates having a service pipe, and not using metered water, on the first day of March in each year, for the year commencing the first day of April succeeding said assessment, and the rates so assessed shall be due and payable in advance on the first day of May following.

Abatement of
water rates.

No abatements shall be made for vacancies in houses or tenements, unless such vacancies shall be of two or more consecutive months' duration, due notice thereof having been given the water board at the beginning of said vacancies, or for a less number of persons occupying any premises, after the annual assessment in March.

All charges for specific supplies, or for any 365th part

of a year, shall be payable in advance, and before the water is let on.

SECT. 12. In all cases of the non-payment of the water rates for thirty days after the same are due, the superintendent shall cut off the supply, and the water shall not again be let on either for the present or any subsequent occupant, except upon the payment of the amount due, together with the sum of two dollars; *provided*, that in any case where the water may have been let on by mistake or otherwise before payment of the water rate, and contrary to section eleven, it may be cut off without notice. Shutting of water.

Unless the water board shall otherwise direct, the foregoing provisions shall apply when two or more parties take the water through the same service pipe, although one or more may have paid the proportion due from him or them.

SECT. 13. The water board may make abatements in the water rates, in all proper cases. Abatements.

SECT. 14. No member of the water board, and no person appointed to any office, or employed, by virtue of this ordinance or of the acts of the legislature mentioned in the first section, shall be interested directly or indirectly in any contract, bargain, sale, or agreement in relation to the water works, or any matter or thing connected therewith, wherein the city is interested; and any and all contracts, bargains, sales, or agreements made in violation of this section shall be utterly void as to the city. Members of board to be disinterested.

SECT. 15. Any person who shall injure any public pipe or reservoir connected with the Lowell water works, or who shall break and enter the same, or draw off, or cause to be removed any of the water therefrom, or shall turn on or off the water in any such water pipe or reservoir, or shall make any opening or connection with such pipe or reservoir, or remove the cover of any hydrant, except in case of fire, without the license or permit of the water board, superintendent, or chief engineer of the fire department, who may open them for fire department purposes, shall forfeit and pay for each offence not less than three nor more than twenty dollars. Interference with pipes, &c.

Applications.

SECT. 16. The Superintendent, under the direction of the water board, shall require all persons desiring water introduced into their premises to sign an application therefor, after which he may without delay proceed to lay the necessary service pipe, in all cases to the interior of the building, and all expense incurred beyond the line of the street shall be paid by the owner of the premises.

Regulations.

SECT. 17. The following regulations shall be considered a part of the contract with every person who takes the water; and every such person, by taking the water, shall be considered to express his assent to be bound thereby. They shall be printed upon every bill for water rent, and whenever any one of them is violated, the water shall be cut off from the building or place of such violation, although two or more parties may receive the water through the same pipe, and shall not be let on again, except by the order of the water board, and on payment of two dollars; and in case of any such violation, the said board shall have the right to declare any payment made for the water by the person committing such violation, to be forfeited, and the same shall thereupon be forfeited.

REGULATIONS.

First.—All persons taking the water shall keep the service pipes within their premises, including any area beneath the sidewalk, in good repair and protected from frost at their own expense; and they will be held liable for all damage which may result from their failure to do so.

Second.—They shall prevent all unnecessary waste of water, and there shall be no concealment of the purposes for which it is used.

Third.—No alteration shall be made in any of the pipes or fixtures inserted by the city, except by its agents, who are to be allowed to enter the premises supplied, to examine the apparatus, and to ascertain whether there is any unnecessary waste.

Fourth.—No water is allowed to be supplied to parties not entitled to the use of it under the city ordinances, unless by special permission.

Fifth.—The superintendent, with the necessary agents and assistants, may enter the premises of any water-taker to examine the quantity used, and the manner of use, and to cut off the water for non-payment of rents or fines, or any violation of the foregoing rules.

SECT. 18. The occupant of any premises, when an ^{Waste, &c.} unnecessary waste of water occurs, shall be liable to a fine of two dollars for the first offence, and four dollars for the second offence during the same year, and shall be notified thereof in writing, and if such waste shall not be prevented, and the fine aforesaid paid within two days from the time when said notice was given, the water shall be cut off from the said premises, and shall not again be let on until the waste be stopped and the fine paid, together with an additional sum of two dollars for cutting off and letting on the water; and in case of a third or subsequent offence, the water shall be cut off and shall not again be let on, except by vote of the board and the payment of such fine, not exceeding ten dollars, as the board may impose.

SECT. 19. The water board shall have power to estab- ^{Water board may establish regulations.} lish such regulations as they may deem expedient for the introduction and use of water; and the water shall not be supplied to any building unless the pipes and fixtures shall be made conformable to the said regulations.

SECT. 20. The following rates shall be charged annu- ^{Water Rates.} ally for the use of the water from and after the first day of April, in the year eighteen hundred and eighty, and *pro rata* for any 365th part of a year.

For a family not exceeding six persons, six dollars. —

Families of more than six persons shall pay fifty cents for each additional person above six.

Fixtures allowed. Under the foregoing rates the fixtures allowed in constant use shall be one hot and one cold water faucet at two sinks and two set wash basins. —

Sinks and Basins. All sinks more than two shall be assessed one dollar each, and all set wash basins more than two shall be assessed fifty cents each.

Water Closets. Water closets in dwellings, stores, and shops shall be assessed fifty cents for each person residing or employed on the premises, provided no water

closet shall be assessed less than four dollars; and where more than one water closet is in use, each additional one shall be assessed two dollars.

For Stores, &c. For each store, office, warehouse, machine or other shop, or foundry, fifty cents shall be assessed for each individual using water in sinks and urinals, for sanitary purposes only, provided that no assessment on any such premises shall be less than three dollars.

Baths. Bath tubs in dwellings or tenements shall be assessed fifty cents for each person residing in such dwelling or tenement; *provided*, that no bath tub shall be assessed less than three or more than eight dollars; and each bath tub more than one in any dwelling or tenement shall be assessed one dollar.

Set wash tubs in dwellings shall be assessed one dollar each, if supplied with city water either by faucet, hose, or spout.

Steam boilers in dwellings, for heating purposes, shall be assessed one dollar each; for blocks and public buildings, two to five dollars each building.

Persons counted. In ascertaining the number of persons as a basis for assessments provided for in this section, children, servants, and lodgers shall be counted.

Third. — Private stables, including water for washing carriages, four dollars, and for each horse over one, two dollars; each cow, two dollars; livery stables, including water for washing carriages, for each horse, two dollars; *provided*, that in no case shall any sale or livery stable be charged less than twenty-five dollars; omnibus or horse-railroad stables, for each horse, one dollar and fifty cents; truckmen's stables, for each horse, one dollar and fifty cents; club stables, for each horse owned by different persons, four dollars; for each additional horse owned by such persons, two dollars.

Fourth. — The right to attach a hose of not more than five-eighths of an inch orifice, for washing windows and sprinkling streets or gardens, shall be three dollars per year or fractional part thereof, and where the same connection is also used for washing carriages, charge shall be made for such double use; *provided*, stable rates are

not charged. The use of the same shall be limited to one hour per day.

For Building purposes. For every cask of lime or cement used, six cents, which shall be assessed upon the owner of the premises where such lime or cement is used.

Steam Engines. For each engine working not over twelve hours a day, for each horse power, four dollars.

When water is required for purposes not specified in the foregoing tariff, the rates shall be fixed by the water board.

Hotels. For each bed for boarders and lodgers, three dollars and fifty cents, or special arrangements may be made with the water board.

Baths. For public baths, and for each bath in any hotel, ten dollars.

Water closets in public bath houses, ten dollars.

Churches. First faucet, six dollars; each additional faucet, three dollars.

Water Closet. Four dollars; each additional water closet, two dollars.

Baptistery. Two dollars.

Hose. Three dollars.

Urinal. Three dollars.

Apothecaries. Ten dollars.

Photograph Galleries. Fifteen dollars.

Saloons. Ten to twenty-five dollars.

Bar-rooms. Five to twenty-five dollars.

Meat Markets. Six to fifteen dollars.

Fish Markets. Six to fifteen dollars.

Tumbler Washers. Three dollars each.

Private Fountains. Three to ten dollars each.

Portable Fountains. Three to ten dollars each.

Aquaria. Three dollars each.

Barber Shop. Four chairs or less, six dollars; each additional chair, one dollar.

Blacksmiths. For first forge, three dollars; for each additional forge, one dollar and fifty cents.

Billiard Saloons. For first table, three dollars; each additional table, one dollar and fifty cents.

Club Rooms. Not less than three dollars, nor more than twenty dollars.

Bakeries. For the average daily use of flour, for each barrel, the sum of three dollars per annum, provided that in no case shall any bakery be charged less than six dollars per annum.

Fire services shall not be used for supplying water for any purpose, except in case of fire, or in testing the services.

The use of water through hose shall be limited to one hour per day; and is prohibited on the public streets between the hours of eight a. m., and half an hour p. m., and between one and a half hours p. m., and six p. m.

The water rates established by this section permit the use of water only upon the premises for which such rates are charged.

Use of Meters. Meters. After the first day of April, persons charged for the use of water at the annual rates shall not be allowed to change from annual to metered rates; *provided*, however, that prior to the first day of March in each year, all water-takers who desire to pay metered instead of annual rates, may apply to the water board for a meter to be placed within their premises on the first day of April following. Said meter shall be furnished and set by the city of Lowell, and the expense thereof shall be paid by the person making application therefor, within thirty days from the time the meter is set; the said city to remain the owner of said meter until the expense of the same is paid.

The charge for metered water shall be fixed and determined by the water board, and bills shall be made payable quarterly, on the first days of January, April, July, and October, and if not paid in thirty days after the same are due, the water shall be shut off in accordance with the provisions of Sect. 12.

The water board shall have the power to ascertain by meter the quantity of water used in any case, and when in any case the quantity used shall be ascertained and measured by meter, the water board may charge for measured water or establish a water rate therefor instead of the specific rate hereinbefore established.

If a meter gets out of order and fails to register, the consumer may be charged at the average daily consumption, as shown by the meter when in order.

Repairs of meters may be made by the water board, at the expense of the owners, whenever the water board deem repairs necessary, and no meter shall be moved or disturbed without permission from the superintendent of the water works. In no case where a meter is set shall the annual charge be less than twelve dollars, which minimum annual charge shall be payable in advance, in all cases where the first quarterly reading of said meter does not indicate such an amount of water used.

SECT. 21. For water used by the city an account shall be made, and the amount thereof shall be charged to the proper appropriations and credited to the water works. Water used for city.

SECT. 22. It shall be the duty of the police of the city to report to the mayor all cases of leakage, waste, or unnecessary profusion in the use of the water, and all violations of the water ordinances, that may be brought to their notice. Police to report leakage.

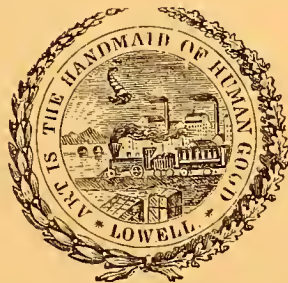
SECT. 23. For the purpose of providing for the debt of the city of Lowell, now existing, or that may hereafter exist by reason of the introduction of water, a fund is hereby established, to be called the City of Lowell Water Loan Sinking Fund. Sinking fund.

SECT. 24. For the payment of the certificates of debt known as the City of Lowell Water Loan Bonds, there shall annually be appropriated the sum of twenty-five thousand dollars, to be raised by taxation, and said sum so raised from year to year, together with its accumulations of interest, shall be pledged and held as said City of Lowell Water Loan Sinking Fund, and shall be invested by the city treasurer, under direction of the joint-committee on finance,* for the redemption and payment of the said City of Lowell Water Loan Bonds, due November 1, 1890. Payment of water bonds.

*Under the provisions of Chapter 209 of the acts of the Legislature of Massachusetts of 1875, the Fund is now invested by the Commissioners of Sinking Funds.



FIFTY-FOURTH
ANNUAL REPORT
OF THE
SCHOOL COMMITTEE
OF THE
CITY OF LOWELL,
TOGETHER WITH THE
SIXTEENTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF PUBLIC SCHOOLS
REPORTS ON DRAWING, EVENING SCHOOLS AND MUSIC,
AND AN APPENDIX.
1879.



LOWELL.
MARDEN & ROWELL, BOOK AND JOB PRINTERS.
1880.

CITY OF LOWELL.

IN SCHOOL COMMITTEE, }
December 29, 1879. }

DR. FRANKLIN NICKERSON, Chairman of the Committee on Reports, having presented the subjoined Report this day, it was unanimously adopted as the Report of the School Committee for 1879.

The Superintendent having at the same time submitted his Annual Report, it was unanimously accepted.

It was voted that five thousand copies of the above Reports with those of the Committee on Evening Schools, Music and Drawing be printed and distributed under the direction of the Committee on Reports and Superintendent.

CHARLES MORRILL,

Secretary.

ORGANIZATION

OF THE

SCHOOL COMMITTEE, 1879.

JOHN A. G. RICHARDSON, Chairman.
 WILLIAM M. HOAR, Vice-Chairman.
 CHARLES MORRILL, Secretary.

MEMBERS OF THE SCHOOL COMMITTEE.

| | |
|---|-----------------------|
| JOHN A. G. RICHARDSON, Mayor | } <i>Ex Officiis.</i> |
| EDWARD B. PEIRCE, President of the Common Council | |
| Ward 1 — WILLIAM M. HOAR | Term expires 1879 |
| TIMOTHY H. BRENNAN | “ “ 1880 |
| “ 2 — HENRY J. McCOY* | “ “ 1879 |
| DANIEL P. GALLOUPE | “ “ 1880 |
| “ 3 — JOHN J. GREEN | “ “ 1879 |
| JOHN H. MORRISON | “ “ 1880 |
| “ 4 — CHARLES H. ALLEN | “ “ 1879 |
| SOLON W. STEVENS | “ “ 1880 |
| “ 5 — WARREN S. FOOTE | “ “ 1879 |
| GEORGE C. OSGOOD | “ “ 1880 |
| “ 6 — FRANKLIN NICKERSON | “ “ 1879 |
| LEONARD HUNTRESS, JR. | “ “ 1880 |

STANDING COMMITTEES.

ON ACCOUNTS — Messrs. Richardson, Peirce, Hoar, Osgood and McCoy.
 ON SCHOOL-HOUSES — Messrs. Allen, Foote, Green, Galloupe and Brennan.
 ON TEACHERS — Messrs. Green, Hoar, Foote, Allen and Stevens.

* Elected by the people December 10, 1878, for one year, *vice* Robert L. Read, resigned.

ON REPORTS — Messrs. Nickerson, Galloupe, Osgood, Morrison and Huntress.

ON TEXT-BOOKS — Messrs. Hoar, Green, Nickerson, Allen, Foote and Stevens.

ON SALARIES — Messrs. Richardson, Nickerson, Morrison, Huntress and Osgood.

ON PENMANSHIP AND DRAWING — Messrs. Allen, Green, Foote, Huntress and Brennan.

ON MUSIC — Messrs. Footé, Nickerson, Allen, Stevens and Morrison.

ON EVENING SCHOOLS — Messrs. Greene, Hoar, McCoy, Brennan and Morrison.

ON SUSPENSION OF SCHOOLS — Messrs. Richardson, Galloupe and Peirce.

ASSIGNMENT OF SCHOOLS.

THE MAYOR — High, Reform.

MR. PEIRCE — High, Mixed 1 and 2, Primaries 19, 39.

DR. HOAR — High, Reform, Green, Primaries 8, 12, 23, 29, 32.

MR. BRENNAN — Mann, Primaries 11, 22, 26, 41, 43, 44.

MR. MCCOY — High, Primaries 1, 3, 7, 18, 21, 53.

MR. GALLOUPE — Varnum, Primaries 46, 47, 48, 49, 55, 60, 61.

MR. GREEN — High, Edson, Primaries 4, 54, 59, 66.

MR. MORRISON — Colburn, Primaries 13, 16, 20, 37, 57, 64.

MR. ALLEN — High, Reform, Franklin, Primaries 17, 34, 50, 62, 67.

MR. STEVENS — High, Intermediate 1, Primaries 24, 27, 28, 31, 42.

MR. FOOTE — High, Bartlett, Primaries 2, 40, 45, 58, 65.

DR. OSGOOD — High, Reform, Primaries 10, 36, 38, 63.

DR. NICKERSON — High, Primaries 5, 6, 15, 30, 33, 56.

DR. HUNTRESS — Reform, Moody, Primaries 9, 14, 25, 35, 51, 52

CHARLES MORRILL, Superintendent of Public Schools.

Office in City Government Building.

OFFICE HOURS — From April 1st to October 31st, inclusive, from 11.30 A. M. to 12.30 P. M. From November 1st to March 31st, inclusive, from 4 to 5 P. M. Wednesday and Saturday afternoons, from 2 to 3 o'clock.

TRUANT COMMISSIONERS.

BICKFORD LANG,

ROBERT L. READ,

WILLIAM H. BIRMINGHAM.

Office in City Government Building.

ORGANIZATION
OF THE
SCHOOL COMMITTEE, 1880.

FREDERICK T. GREENHALGE, Chairman.
CHARLES H. ALLEN, Vice-Chairman.
CHARLES MORRILL, Secretary.

MEMBERS OF THE SCHOOL COMMITTEE.

| | | |
|---|-----|---------------------|
| FREDERICK T. GREENHALGE, Mayor | } | <i>Ex Officiis.</i> |
| EARL A. THISSELL, President of the Common Council | | |
| Ward 1—TIMOTHY H. BRENNAN | | Term expires 1880 |
| JOHN A. SMITH | " " | 1881 |
| " 2—DANIEL P. GALLOUPE | " " | 1880 |
| HENRY J. McCOY | " " | 1881 |
| " 3—JOHN H. MORRISON | " " | 1880 |
| MICHAEL SEXTON, | " " | 1881 |
| " 4—SOLON W. STEVENS | " " | 1880 |
| CHARLES H. ALLEN | " " | 1881 |
| " 5—GEORGE C. OSGOOD | " " | 1880 |
| JOHN J. COLTON | " " | 1881 |
| " 6—LEONARD HUNTRESS, Jr. | " " | 1880 |
| SAMUEL A. CHASE | " " | 1881 |

STANDING COMMITTEES.

- ON ACCOUNTS—Messrs. Greenhalge, Thissell, Chase, Morrison, Smith.
ON SCHOOL-HOUSES AND HYGIENE—Messrs. Allen, Brennan, Huntress, Galloupe, Sexton.
ON TEACHERS—Messrs. Galloupe, Allen, Stevens, Colton, Morrison.

ON REPORTS—Messrs. Huntress, Colton, Osgood, Morrison, Smith.

ON TEXT-BOOKS—Messrs. Stevens, Galloupe, Allen, Smith, Chase, Sexton.

ON SALARIES—Messrs. Greenhalge, Huntress, Morrison, McCoy, Galloupe.

ON PENMANSHIP AND DRAWING—Messrs. Allen, Chase, Sexton, Brennan, Huntress.

ON MUSIC—Messrs. Stevens, Colton, Osgood, McCoy, Sexton.

ON EVENING SCHOOLS—Messrs. Osgood, Brennan, McCoy, Colton, Smith

ON RULES AND REGULATIONS—Messrs. Colton, Brennan, Osgood, Stevens, McCoy.

ASSIGNMENT OF SCHOOLS.

THE MAYOR—High and Reform Schools.

MR. THISSELL—Reform School.

MR. BRENNAN—Mann, Primaries 44, 22, 41, 43, 11, 26.

MR. SMITH—Primaries 8, 29, 12, 23, 69, 10, 63, Mixed No. 1.

MR. GALLOUPE—High, Varnum, Primaries 46, 47, 48, 49, 55, 60, 61.

MR. MCCOY—Green, Primaries 7, 21, 53, 18, 1, 3.

MR. MORRISON—High, Reform, Colburn, Primaries 33, 56, 30, 15, 6, 5.

MR. SEXTON—Primaries 20, 57, 13, 68, 64, 66, 59, 71.

MR. STEVENS—High, Edson, Primaries 24, 28, 27, 42.

MR. ALLEN—High, Reform, Franklin, Intermediate, Primaries 17, 34, 50, 62, 67, 31.

MR. OSGOOD—Reform, Primaries 2, 65, 40, 45, 36, 38, 70, 4, 54.

MR. COLTON—High, Bartlett, Primaries 32, 58, Mixed No. 2.

MR. HUNTRESS—High, Primaries 14, 25, 16, 37, 9, 51, 19, 39.

MR. CHASE—Moody, Primaries 35, 72, 52.

CHARLES MORRILL, Superintendent of Public Schools.

Office in City Government Building.

OFFICE HOURS.—One hour after the forenoon session, of the schools, and from 2 to 3 o'clock on Wednesday and Saturday afternoons.

TRUANT COMMISSIONERS.

BICKFORD LANG,

WILLIAM H. BERMINGHAM.

Office in City Government Building.

REPORTS.

REPORT.

Within the narrow limits of the prescribed annual report, and that too, after a term of service too short for the solution of the problems presented, and the completion of the tasks imposed, a school committee can only coast along the continent of the vast educational system to which their duties relate and touch at a few points in its outline. According to this view, we shall consider only two subjects, namely, finance and hygiene, with such incidental questions as they may involve.

In a paper lately written by Mr. C. F. Adams, jr., it is stated that about one-fifth of the entire amount raised by taxation in the state of Massachusetts is expended on the public schools. This gentleman has also prepared from the reports of the state board of education, a table in which the average annual appropriation per scholar, for salaries, heating and care of rooms in twenty principal towns and cities of the state is calculated, first, from 1859-1878, secondly, from 1876-1878, and thirdly for 1878. Lowell stands on each list eighth, tenth and eleventh, respectively, in the

order of the largest amounts. In the first period mentioned, the average annual appropriation per scholar, in Lowell, was three above the same average for the Commonwealth, in the second period, one above, and in the third, one above. It is to be observed, also, that the average for the Commonwealth has doubled within the last twenty years, and Lowell has not fallen far behind in this increase.

In another table in which the annual appropriation per scholar in the same cities and towns from 1859-1878 is given, this appropriation is shown to have reached its maximum in Lowell in 1874, and to have declined since then, that is to say, in the period which is nearly coincident with the duration of the recent financial panic.

During the five years ending January 1, 1879, the average net expenditures of the public schools of Lowell have exhibited the following proportions to the average net current expenditures of the city:—

| | | |
|--|-----------|-----------------|
| Department of Schools and School-houses, | | 23.85 per cent. |
| “ “ Schools, | | 21.42 “ “ |
| “ “ School-houses, | | 2.43 “ “ |
| New School-houses, | | 2.32 “ “ |
| Salaries of day teachers, | | 15.96 “ “ |

Since the last item in this list forms a large part of the entire school expenditures and a still larger proportion of the running school expenses which alone are under the immediate direction of the school committee, it is well to know the marketable value of teachers' services as a kind of thermometer with which to measure the heat of their extravagance or the coldness of their parsimony, as the case may be. The

following schedule made up in the spring of 1879, in the school report of a neighboring city, is therefore offered with a few changes by ourselves.

| CITIES. | Primary Principals. | Primary Assistants. | Grammar Assistants. Female. | Grammar. Male Principals. | High Sch'l Assistants. Female. | High Sch'l Assistants. Male. | High Sch'l Principal. | Superintendent. |
|-----------------|---------------------|---------------------|-----------------------------|---------------------------|--------------------------------|------------------------------|-----------------------|-----------------|
| Newton . . . | 750 | 500-600 | 500-600 | 1500-2000 | 1100-1200 | 1850 | 2700 | 2700 |
| Salem | 600 | 500 | 500-800 | 1800 | 650-1100 | 1200 | 2500 | 2500 |
| Cambridge . . | 500-600 | | 500-725 | 2000 | 850-950 | 1800-2600 | 3000 | 2700 |
| Springfield . . | 450-550 | 400 | 550-600 | 1700 | 650-1000 | 1000-1700 | 2600 | 3000 |
| Worcester . . | 450-540 | | 450-540 | 1620 | 720-810 | 900-1865 | 2430 | 2750 |
| Lowell | 450-550 | | 450-550 | 1500 | 650-750 | 1500-1800 | 2200 | 2000 |
| New Bedford . | 525 | 450 | 425-525 | 1550 | 800-900 | 1550 | 1800 | 2000 |
| Taunton . . . | 420-500 | 420 | 420 | 1030-1250 | 450-850 | 1000 | 1600 | 1750 |
| Providence . . | 500-525 | 350-500 | 575-700 | 700-1900 | 625-1400 | 1100-1900 | 2100 | 2250 |
| Fall River . . | 320-440 | 240-320 | 400-520 | 1450-1600 | 760-900 | 700-1700 | 2500 | 2000 |
| Lawrence . . | 500-550 | 300-350 | | 1300-2000 | 900 | 1000 | 2500 | 2000 |
| Newport . . . | 360-450 | | 520-560 | 1000-1200 | 900-1200 | 1500-2200 | 3500 | |
| Lynn | 350-550 | | 350-550 | 1500 | 725 | | 2400 | |

In July the school committee of Lowell voted a reduction of salaries, to the extent of \$3600. This reduction was confined to the salaries of the superintendent, the High school teachers, grammar-masters and special teachers. The pay of the High school assistants has been cut down to a point below that attained in any city similar in size or importance to our own. Without dwelling on the evident amount of labor and ability expected from teachers of this class, or on the merits of the present incumbents, it is believed that whether the compensation rendered for their services is absolutely too small or not, it seems

too small relatively to that of teachers of the lower grade, and so tends to weaken, in the latter, a laudable ambition for promotion, while it offers no special inducement to outsiders. Only three candidates presented themselves at the examination for teachers of the second grade, and not one of these belonged to the corps of teachers already in service. The additional work and responsibility imposed on the High school assistants by the new method proposed for the examination of applicants for admission to the High school, should, if this method be adopted, give a fresh impetus to the question of revising the salaries under discussion, a question which is already pending in this board.

Through the vigilance of the chairman of the committee on school-houses and hygiene, the department of accounts has been enabled to make a good financial showing this year, by a reduction in the amount paid for the use of city water. This reduction has been effected by placing meters in the larger school buildings. According to the following list of items, the account kept for the six months ending October 1st, and a reasonable estimate for the remaining six months of the year, indicate a saving of over four hundred dollars:—

| Sch'l House | Reading of Meter 1st Quarter. | Reading of Meter 2d Quarter. | Total Amount used in 6 mos. to Dec., 1879. | Aproximate amount for year. | Amount charged in bill rendered April, 1879. |
|--------------|-------------------------------------|------------------------------------|--|-----------------------------------|---|
| Bartlett | 4 50 | 1 50 | 6 00 | 12 00 | 99 00 |
| Colburn | 1 50 | 90 | 2 40 | 4 80 | 71 00 |
| Edson | 4 50 | *13 38 | 17 88 | 35 76 | 89 00 |
| Franklin | 8 70 | 45 | 9 15 | 18 30 | 53 00 |
| Green | 39 15 | 15 75 | 54 90 | 109 80 | 103 00 |
| High | 76 50 | 15 75 | 92 25 | 184 50 | 188 00 |
| Mann | 5 40 | 1 50 | 6 90 | 13 80 | 89 00 |
| Moody | 3 60 | 1 95 | 5 55 | 11 10 | 56 00 |
| West Sixth | 30 | 1 50 | 1 80 | 3 60 | 24 00 |
| Common St. | 91 35 | 16 95 | 108 30 | 216 60 | 104 00 |
| Lyons Street | 13 50 | 1 65 | 15 15 | 30 30 | 66 00 |
| Worthen St. | 1 50 | 45 | 1 95 | 3 90 | 32 00 |
| School St. | 3 45 | 1 20 | 4 65 | 9 30 | 63 00 |
| Varnum St. | 90 | 60 | 1 50 | 300 | 120 00 |
| | | | | \$656 76 | \$1,087 00 |

* All the water used for mixing mortar and all other purposes this summer, during the repairs on that building, came through their meter and was doubtless more in quantity than was used for school purposes.

We have hitherto spoken of the upward tendency of public school expense and the special efforts made in Lowell for its diminution. Let us now consider broader schemes of retrenchment.

The writer above quoted says that in 1875, when the new departure in the management of the public schools of Quincy was made, the cost of educating each child was \$19.24; three years later it was \$15.68, while the quality of the instruction given had been immeasurably improved. He attributes the success of the Quincy experiment to the following circumstances: First, the committee was kept in office long enough to plan and carry out a policy; second, the committee had a distinct idea of something

to be done and a method of doing it; third, the employment of a competent executive officer, (and he might have added, with a sort of *carte blanche* given that officer, to form and carry out his plans untrammelled.) The writer believes that in the light of this recent experience, a better education than is now given can be furnished throughout the state at a cost not exceeding \$17 per scholar and including everything but new buildings. The specific steps by which this estimate is reached, or by which the cost of education in Quincy has been lessened, are not stated. A glance at the report of Superintendent Parker, for 1878, however, informs us that the average cost of each day scholar for tuition based on the average number belonging, is \$15.22, while in Lowell it is only \$14.94. In Quincy there are seven school structures, while the average number of pupils is 1484 or two hundred and twelve to a building. In Lowell there are forty-one school-structures, and the average number of pupils is 6145, or about 150 to a building. Remoteness of residence from the schools is remedied by the conveyance of pupils to the latter in carriages at an expense, during the year mentioned, of \$725.70. There are also no evening schools and no special teachers. In comparing town and city, too, we have to consider, in the former, the simplicity of the machinery with which all public works are carried on, the peculiarities in the class of pupils dealt with, the cheapness of land, and the fact that the school-houses are built of wood, while in the city they are often, necessarily, built of brick, which is more expensive.

The new departure in the Quincy schools, with all that it has accomplished and all that it promises, is still an experiment. The educational methods there employed, have not been fully carried out in all branches of instruction. Wants are already suggested; new wants will doubtless arise, and these wants are not unlikely to necessitate new expenditures. In education, as in other important affairs of the human mind, causes and effects are widely separated, so that a long series of years is often required for the production of decisive results. We must, therefore, wait observantly before we can decide whether we have found in the field we have just looked over, a panacea for the financial ailments of our public school system.

Recently, the superintendent and a few members of the Lowell school board, made a visit to the Quincy schools, and were so favorably impressed with the methods of training observed there, that, at the suggestion of the superintendent, certain school-rooms in this city have been set apart for the application of these methods. We look forward with interest to the results of these experiments and their future bearing on the question of school finance.

But even with the modes of school management in common use, we may look not without hope for a check to the present flood-tide of public school expense in one or both of two expedients; namely, the restriction of the minimum school age to seven years and the half time system, according to which two sets of children go to the same school, one set attending in the forenoon and the other set in the

afternoon. Both of these expedients are based primarily on physiological grounds, but it needs no argument to prove that either of them, if adopted, would be a measure of economy.

In Lowell, there are about fifteen hundred children under 7 years who attend school. Their removal from the schools would reduce the total average number of pupils belonging, from about 6000 to 4500.

Since from birth up to seven years of age, the brain grows with special rapidity and requires, for its growth, a large supply of blood; active diseases of this organ are very common at this stage of life. Moreover, during this period, that element of nervous structure which presides over motion is in excess, so that the tendency to convulsive diseases is strong. It is believed that school-life, as at present maintained, is conducive to the diseases just mentioned, on account of its confinement, its bad air, the distorted positions of the body from misconstructured seats, and the Procrustean methods of discipline frequently employed. The herding together, too, of young children favors the spread of certain contagious diseases to which childhood is peculiarly susceptible. A few years ago the Rhode Island medical society passed, together with other resolutions on the subject of school hygiene, the following one, "That no child should be admitted to our public schools, as now conducted, under seven years of age."

Under the half-time system, the number of teachers would be diminished, while the economical necessity of maintaining the illegal number of over fifty

pupils under one teacher, would cease to be felt. With a reduced number of pupils, ventilation would be improved and discipline and instruction would be easier and more effective.

The half-time schools in England, which have been in successful operation for several years, were founded on the ideas that factory children should be educated as well as others, and that their physical capacity was not equal to a full day's work. These children are arranged in two classes. For five days in the week, the first class is in school from 9 to 12 A. M. and in the mill from 2 to 6 P. M.; during the same period, the second class is in the mill from 6 A. M. to 1 P. M., (less breakfast time) and in school from 2 to 5 P. M. The only half-time factory school in this country resembling these, as far as we know, is the Naumkeag school in Salem, which, according to the school reports of that city for the past ten years, has been a success. Further information concerning these schools can be found in the reports of the Massachusetts Bureau of Statistics of Labor for 1871, 1875 and 1878, and in the report of the State Board of Health for 1874. Mr. Chadwick, the distinguished sanitarian of England, says that the "half-timers" learn as much as "full-timers." Several teachers in these schools testify to the same fact.

The half-time system has been applied to the regular day schools in many places in this country. Superintendent Harris, of St. Louis, says, "To some extent we have tried it in the primary grades (first year's work) for three years." "The observation

made in Chicago that the progress of the pupils in their studies is reported to be nearly as rapid as by the whole time plan is generally endorsed by our teachers."

Superintendent Stone, of San Francisco, says, "According to the testimony of teachers and my own observation, the actual progress of half-time classes is fully equal to that of full-time classes. I regret exceedingly that it has seemed necessary to expand into all day classes the half-time classes inaugurated in 1877." It seems as if the half-time system would be suited to our primary schools, where, by common observation, we find the last hour in the afternoon session irksome, and in the lower grades, almost useless. This is especially the case in crowded and ill-ventilated school-rooms and in the summer.

The objections which have been raised in actual practice to the half-time system, as applied to day-schools, have come, first, from parents, who, measuring the human mind and its cultivation by mechanical rules, think that under this system, their children do not receive in yards and pounds of knowledge, an equivalent for the dollars and cents expended; secondly, from those who want to get rid of parental care during the day; thirdly, from those who being obliged to go away from home to work, in their absence, find the school-house a convenient place of safety for their children. The first and second class of objections are, of course, unreasonable. Concerning the third class we remark, if our schools are asylums, an idea which the law does not contemplate, then let the money paid for their support be charged to the department of asylums and not to that of schools.

But do what we may in the line of the most rigid economy, the fact still remains that our school expenses must be large if we would keep pace with the progress of the times. We live in an eminently scientific age. The great problems of education must be worked out by scientific methods, and these methods require for their execution the employment of skilled teachers. In order to maintain the standard of excellence required, these teachers must receive salaries that shall not only enable them to meet the increased demands of living and society which are the results of a long war with its attendant luxuries, but to improve themselves in their profession by study and observation outside of their routine work.

The people of Massachusetts have willingly borne the burden of taxation for the support of their public school system, because they believe that this system is the corner stone of the republic itself and one of the chief sources of their own moral and intellectual supremacy. While the city of Lowell shares in this belief, she is especially justified in her school expenditure, by her exceptionally good financial standing, even throughout the late depression of business, by the good sense and law-abiding character of her people, by the sound condition of her schools, and by her high rank in the column of illiteracy.

Table of Illiteracy in 20 cities and towns in Massachusetts in 1875.

| CITIES. | Population. | Number of Illiterates. | Per cent. of Illiterates. |
|-----------------------------|-------------|------------------------------|---------------------------------|
| Chelsea, | 20737 | 547 | .026 |
| Haverhill, | 14628 | 424 | .028 |
| Lynn, | 32600 | 1010 | .03 |
| Newburyport, | 13523 | 594 | .043 |
| Lowell, | 49688 | 2209 | .044 |
| Somerville, | 21868 | 983 | .044 |
| Fitchburg, | 12289 | 559 | .045 |
| Gloucester, | 16754 | 955 | .056 |
| Cambridge, | 47838 | 2746 | .057 |
| Northampton, | 11108 | 743 | .067 |
| Springfield,, . . | 31053 | 2173 | .069 |
| Taunton, | 20445 | 1422 | .069 |
| Salem, | 25958 | 1792 | .069 |
| Lawrence, | 34916 | 2580 | .073 |
| Adams, | 15760 | 1210 | .077 |
| Pittsfield, | 12267 | 1065 | .086 |
| Worcester, | 49317 | 4250 | .086 |
| New Bedford, | 25895 | 2295 | .088 |
| Fall River, | 45340 | 5556 | .122 |
| Holyoke, | 16260 | 2969 | .182 |

At the American Centennial Exposition, a map of Massachusetts was exhibited in which every town and city in the state was circumscribed with a white circle. The proportion of illiteracy in each town and city was indicated by a black segment. It may be seen by the foregoing table that Lowell's black mark must have been small, as compared with that of other large places.

George Combe says in his admirable work on the principles and practice of education: "The *physique* must precede the *morale* in the order of nature. We must be well lodged, clothed and nourished, and altogether physically comfortable before we can bend our minds successfully to refinement, philosophy and the investigation of abstract science." This truth, however well recognized in theory, has been but imperfectly put into practice. Some perfunctory generalizations concerning it, scattered references to the work done by a few leaders in sanitary science, and a more or less vigorous beating of the air with pointless exhortations on the necessity of preserving the health, form, with but few exceptions, the chief part of what is found, when anything is found at all on this important subject in the school reports that have come under our inspection. Teachers, too, well grounded or otherwise in the book-knowledge of anatomy, physiology, chemistry and hygiene, come to their work with very meagre ideas concerning the application of these sciences to the wants of their pupils. In fine, it is only of late that the thoughts of the American people have been especially turned to the subject of school hygiene, notably by the Massachusetts and Michigan State Boards of Health, The Sanitarian, Dr. D. F. Lincoln and a few others. In the Lowell school board during the past year, the title of hygiene has been added to that of the committee on school-houses. This committee, with the aid of the board of health, have done good service in ferreting out nuisances and abating them. Some of

the vaults were found to be in an indescribably filthy condition. One school, a centre of diphtheria a few years ago, and with a seating capacity of one hundred and twelve, had been too long allowed to be occupied by nearly double that number of pupils. The committee on hygiene has also undertaken a special investigation of the sanitary condition of all the school-houses, and had intended to make a special report on its results at this time, but, owing to the lateness of the season at which the work was begun, and other delays incident to the magnitude of the project, sufficient material has not been collected for fulfilling this intention. In the course of this investigation, facts of so interesting a nature have been already obtained as to warrant the continuance of the experiments which have been inaugurated. As the impurity of the air is gauged by the proportion of carbonic acid present, it has been thought well to determine the amount of the latter contained in the air of different school-rooms. The thanks of this Board are tendered to Mr. Lord, of the High school, for his kindness in volunteering to do this work and for the ability and industry with which he has conducted it. He has tested specimens of air taken from fifty school-rooms and has found in them from six parts to one hundred parts of carbonic acid per ten thousand. Six parts per ten thousand is said to be the highest amount consistent with health. Of the schools examined, the Bartlett grammar, which is considered to have a specially good system of ventilation, makes the best showing. It would be interesting to prosecute this class

of experiments with reference to the number of children present, dimensions of the rooms tested, the temperature, direction and velocity of the wind, the efficiency of different methods of ventilation, the rapidity with which atmospheric impurities accumulate in the progress of the school session, and the effects of this accumulation on the children.

We feel it to be our duty not to dismiss the subject of school hygiene without calling the attention of all who are interested in the welfare of our school children, to our ill-constructed *tables-bancs* and the malpositions of the body which they engender. (The word *tables-bancs* is borrowed from the French as the most convenient expression for the collective idea of seat and desk considered together.) The defects we speak of, are not wholly of our own creation, but appertain to the style and arrangement of school-furniture which are commonly used throughout this country.

In a tour through the schools of our city, an observing visitor cannot fail to be struck with the abnormal postures taken by the scholars. In the lower grades, these postures are more various than in the upper grades, and change more frequently in each person on account of the restless nervous organization of early childhood. Perhaps it is partly in consequence of this fact that in these early grades we rarely find deformities of the spine. An inspection of the backs of children in eleven primary schools furnished an average of between three and four specimens of spinal curvature. As we advance through the upper grades,

this average constantly increases, so that in the High school nearly one-half of the girls in the upper grades are more or less deformed. This proportion is less than that observed in other places. Liebreich speaking of schools in general, says, "Among girls of the higher classes, more than one-half will be found to have at least a slight curvature. The deformity which demands the most serious attention in these cases, is that which is called scoliosis or lateral curvature, and may be roughly described as a spiral twist of the vertebræ, together with an elevation and projection of the shoulder and hip, and a prominence of the ribs on the same side. Another kind of deformity is a stoop of the body, a pushing forward of the shoulders, which Liebreich calls an augmentation of the natural curves of the spine.

Scoliosis is attributed to the influence of school life; first, because it occurs at the school age; secondly, because it does not affect children who do not go to school; thirdly, because it resembles the posture taken in writing, a posture which is carried into other occupations, such as ciphering, drawing, etc. Barwell, an authority on diseases of the joints, says that lateral curvature does not occur among Hindoos, Arabs, etc. Eulenberg says that 90 per cent. of spinal curvatures, not arising from special disease, occur during school life. Guillaume found 18 per cent. of 350 school boys, and 41 per cent. of 381 girls, scoliotic.

The following table shows the percentage among females, of all persons affected with lateral curvature, found by different observers:

| | |
|----------------------|--------------|
| Frey, | 80 per cent. |
| Adams, | 87 " " |
| Klopsch, | 84-89 " " |
| Eulenburg, | 87 " " |
| Knorr, | 83 " " |
| Melchin, | 80 " " |

Dressmakers are well aware of the frequency of this deformity. Its prevalence among girls, according to Liebreich and others, is explained by the delicate character of their spinal structure and by "the antidote to the writing position which boys have in their sports and facilities (which girls do not have) for taking all sorts of postures."

The malpositions of scholars are due largely to defective relations between the seats and desks. For example, the bending forward of the body is owing first to the too great horizontal distance of the desk from the seat, enhanced by the inclination of the back of the seat; and, secondly, to the flatness of the desk which renders a bending forward of the body necessary in order that the eyes may comfortably look at the work before them. The top of the desk is frequently at too long or short a distance above the seat, so that when the arm rests on the desk, as in writing, an elevation or depression of the shoulder is rendered necessary.

The signal of reform in school furniture, which substituted for the old barbarous patterns of seats and desks, the improved type now prevailing, was first sounded in the early part of the second half of the present century in the United States. Since then a great deal of attention has been given to the subject by physicians, engineers and educators in foreign countries.

The Germans with their almost painful industry and aptitude for minute inquiry, occupy the first rank in this class of observers. The monographs of Varrentrapp, Fahrner and Schildbach are very exhaustive, while Zvez, Parow, Buchner, Eulenburg, Frey, Schreber, Flinzer, Guillaume, Passavant and Barnard, of our own country, deserve honorable mention. The little pamphlet on school life and its influence on sight and figure, by Dr. R. Liebreich, of London, is recommended as accessible and interesting to the general reader. The latest and best summary of the whole subject, which we have seen, is the lecture given by M. de Bagnaux before the teachers assembled at the Paris Exposition in the month of August, 1878. This lecture contains tabulated average measurements of 3941 school children, made by M. de Cardot, of Paris. From these measurements, six different types of school seats and desks have been deduced for children ranging from six years of age to thirteen. M. de Bagnaux says, as a proof of the correctness of these figures that the proportions established by M. de Cardot were almost identically reproduced in the *tables-bancs* exhibited in the Russian and Luxembourg departments of the Exposition. It was these measurements, together with some observations made in our own schools, that led the chairman of the committee on reports to make some experiments with the view of obtaining a series of average *tables-bancs* suitable to different grades of scholars. The perfect *tables-bancs* is that which is adjustable to the size of each individual. Many such *tables-bancs* have

been made, but thus far have proved impracticable. If we cannot perfect, therefore, we must try to improve. It is to be borne in mind, also, that however well arranged the *tables-bancs* may be, a perfect position of the pupil cannot be insured without the constant and intelligent supervision of the teacher. In the training of the child to the proper position of the body, more perhaps than in any other branch of education, the parent should aid the teacher, for who can tell how much injury may not be done by the bad postures allowed at home, such, for example, as the piano-stool position? Both parent and teacher should remember that no matter how excellent the posture selected, a too long maintenance of it, fatigues the muscles employed. This fatigue, if not properly remedied, will call into requisition for its relief, a new set of muscles which may throw the body from a good position into a bad one.

By the ingenuity of Capt. Meigs, of this city, who, himself, has made a special study of the anatomy of school children with reference to school-seats, a measuring apparatus has been constructed for the purpose of determining the height of the pupil, the length of the leg from the sole of the foot to the hollow of the knee, the length of the thigh and the height of the elbow above the seat or floor. A desk has been extemporized in the form of a music stand, with a sliding rod, and arranged so that the top of the desk can be placed at different angles adapted to the writing or reading position. This class of measurements has been adopted on principles which we believe are in the

main agreed upon by all hygeists. These principles are: First, when a child is sitting at his desk, the leg should be at a right angle with the floor, the thigh at a right angle with the leg, and the trunk at the same angle with the thigh. Second, the seat should be deep enough to support three-fifths to three-fourths of the length of the thigh in order to afford sufficient resistance to the superincumbent weight of the body. Third, the back of the seat should be only high enough to support the lumbar region or a point somewhat above this, for a back much higher would impede the movements of the thoracic organs. For this measurement the height of the elbow above the seat is a good guide. Fourth, the seat should be so constructed as to prevent a benumbing pressure on the nerves and blood vessels of the thigh. Fifth, the inclination of the desk in the writing position should be from 18° to 20° ; in the reading position from 40° to 45° , in order that the line of vision may be as nearly as possible at a right angle with the centre of the work. Sixth, the desk should be sufficiently near the pupil to prevent the bending over of the body. For this purpose we have thus far found that the posterior edge of the desk should project a few inches over the anterior edge of the seat. In the desks of the Chauncy hall school, in Boston, which is a model institution in its sanitary arrangements, this projection amounts to three and a half inches. Seventh, the desk should be at such a height above the seat that when the arm is resting on the desk the shoulder shall not be raised or depressed. We have

found on several trials that the height of the elbow above the seat is a useful means of determining the desk height. Eighth, the relation of the standing-height to other measurements is desirable for the purpose of obtaining types of *tables-bancs* corresponding to this relation. According to these plans about 150 measurements have been made in Lowell and we hope to continue the work during the coming year.

In concluding this report we offer its contents simply as food for reflection to those who are interested in our schools. If we could be assured that we had impressed those who chance to read what we have written, with the idea that the work of a school committee is not only in the tent, but also in the field, that this work consists not merely in the details which too often at meetings of the board protract the business of an hour into a midnight session, but in study and observation in the school room, we should feel that our efforts had been rewarded.

EVENING SCHOOLS.

LOWELL, January 3d, 1880.

To the School Committee of Lowell:

GENTLEMEN: The Committee on Free Evening Schools to whom was referred the management of the Evening Schools, has attended to its duty, and begs leave to present the following Report:

Your committee took charge of these schools in January, 1879, and found five schools in operation, numbered and located as follows: No. 1, for males and females, in basement of the Green school; No. 2, for males and females, in basement of school house corner of Central and Lyons streets; No. 3, for males, in Ward room on Church street; No. 4, for males and females, in Mission school building on First street; High school in hall of Green school. These were closed in March.

This fall we were obliged to remove the High school from the Green school hall to the upper story of the Primary school building on Worthen street, its old quarters being required by the Free Evening Drawing School. With this exception, the schools were located as before.

The whole number in attendance this year was 1330, the average attendance being 486, while the whole number for the year before was 1397, with an average of 524.

The amount expended for these schools is about \$400 less this year than it was last, \$4,499.17 being the cost of the schools for the season of '77-8, and \$4,105.67 for that of '78-9.

The method of instruction has been the same as that of other years. There is an improvement in the order and discipline of the schools; but there is still room for more. We cannot expect as

perfect discipline here as in the day schools. Scholars confined in workshops and factories during the day, and crowded into poorly ventilated rooms in the evening, cannot preserve the same decorum as those occupying buildings supplied with the latest improvements, having sufficient time for recreation, and not troubled with the cares incidental to a life of labor.

The number that attend each year would show that many see the advantage to be derived from this class of schools, and endeavor to avail themselves of it. The difference between the whole number, and the average number attending, is, no doubt, caused by many taking a portion of the time for personal affairs, recreation, etc. We cannot find fault with them for this, situated as they are, the evening being the only time they can devote to this.

Notwithstanding all the difficulties incidental to the management of this class of schools, your committee recommend that they be continued, being fully convinced of the benefit derived from them by our citizens.

In closing, we present, for your consideration, a summary of the expenses, attendance, etc., of the schools for 1879.

JOHN J. GREEN,
JOHN H. MORRISON,
T. H. BRENNAN,
HENRY J. McCOY,
W. M. HOAR,

Committee on Evening Schools.

SUMMARY.

| SCHOOLS. | No. of Teach- ers. | Even- ings Taught | Whole Number. | | | Average Attendance. | | |
|------------------|-----------------------------|-------------------------|---------------|------|--------|---------------------|------|--------|
| | | | Males. | Fem. | Total. | Males. | Fem. | Total. |
| High | 1 | 63 | 29 | 12 | 41 | 8 | 4 | 12 |
| No. 1 | 23 | 65 | 358 | 309 | 667 | 113 | 82 | 195 |
| No. 2 | 14 | 63 | 253 | 70 | 323 | 127 | 36 | 163 |
| No. 3 | 6 | 63 | 205 | | 205 | 61 | | 61 |
| No. 4 | 7 | 64 | 69 | 25 | 94 | 34 | 21 | 55 |
| Totals | 51 | | 914 | 416 | 1330 | 343 | 143 | 486 |

EXPENDITURES.

| | |
|--|------------|
| Paid to teachers, High-school | \$132.00 |
| Paid to teachers, other schools, | 3,262.75 |
| Paid for janitors, | 327.00 |
| Paid for lighting, | 159 28 |
| Paid for printing and advertising, | 24.75 |
| Paid for books and stationery, | 198.29 |
| Paid for sundries, | 1 60 |
| Total, | \$4,105.67 |

REPORT ON MUSIC.

To the School Committee of Lowell:

There have been but few changes during the past year in the management of the department, under the care of this committee, and such as have been made have already received the approval of the Board. The discontinuance of the annual public exhibition was the principal one. Your committee found that it entailed much labor upon the teachers of those schools which participated in it, that it interrupted the regular school work, and that the outlay of money which it required could be devoted to the greater advantage of all the schools in another way; certain schools, therefore, were allotted to each member of the committee, and they were thus examined, in detail. The result was found to be, in the main, very satisfactory. The regular teachers are doing their work faithfully, and a large share of credit is due them for whatever may have been accomplished. The distribution of pitch pipes among them has been a valuable help, which they have highly appreciated.

The monthly meetings held by the music teacher for the instruction of the primary school teachers, we regret to say, have not been so well, nor so regularly attended by those whom they are designed to benefit, as could be desired. It is in the power of the music teacher to make such meetings very interesting, as well as instructive, and the inspiration afforded by a large and regular attendance, would, doubtless, afford him a sufficient motive to give a great deal of care and attention to their preparation.

The views of the committee are not altogether in accord, in regard to retaining a special teacher in this department, neither are those of the Board, as is shown by the record of his election for the last four years. But your committee are by no means agreed that

it would be wise or expedient to abolish the study of music from the *curriculum* of our schools. The success of the regular teachers in carrying on this special work, seems to indicate the possibility, in the not very distant future, of their becoming competent to assume its entire charge. This could be prepared for by requiring competence to teach singing in candidates for the position of teachers in our primary schools, for it is to these that we must look for the laying of a safe foundation for the work of after years.

Singing is what we desire to have our children learn, not the mechanical drill of the science of music, as much as the use of the voice. It should be the principal object of the teacher to nourish and develop the *voices* and talent of their pupils, and give them an elementary knowledge of music, as an art.

In all schools there are a certain proportion of children who cannot sing at all; and the robust, healthy boys, those who will become bass or baritone singers when they arrive at maturity, have voices very limited in compass, until they have been taught how to use them. The girls, and such boys as will become tenors when they grow up, have lighter and more flexible voices, and more extended in compass. No account is made in the schools of these inequalities. The former class cannot sing as they ought, but they can shout, and shout they do, sometimes in the octave below the melody. A frequent method to get rid of this shouting propensity is to direct them to sing alto, to do which, properly, requires as much special vocal training as any other of the voices. This direction is given to all boys, including those to whom a sweet treble voice is as natural as to a girl.

Children's voices are naturally sweet and pleasing, and that they can be kept so, and developed and improved through the successive years of our schools, until the singing of the High school pupils shall be as pleasant and musical as to delight every hearer, there can be no doubt. And with proper attention given to the *use of the voice*, singing in the schools would become so pleasant an exercise that the elementary knowledge would be much more easily acquired in connection with it, than when it is attempted to impart the latter alone. Voices ruined in early years are irretrievably lost; but properly trained in earliest childhood, they may be preserved

throughout a long life to give pleasure to their possessors and to society.

The committee sincerely hope that this subject may receive particular attention in the future whenever the question of teaching music, or rather singing, in our schools may be under consideration, and that the result of our work in this direction may be perceptible in every household in our city, and in every congregation in the community.

WARREN S. FOOTÉ,
CHAS. H. ALLEN,
SOLON W. STEVENS,
JOHN H. MORRISON,
F. NICKERSON,

Committee on Music.

REPORT ON DRAWING.

Drawing having become one of the fundamental studies now deemed essentially necessary in practically educating a child in the important duties of life, it naturally follows that the committee having that department in charge, have no merely ornamental duties to perform, but are responsible, not alone that proper instruction is provided, but also that the best methods and courses are laid down and properly carried out.

Drawing is thus deemed of great importance, not only because it is the expression of form in every branch of industry, nor solely because it quickens the eye and teaches the hand, and is in this way of great help to the child in learning to read and write, but, particularly, because there is no branch or form of mechanical work that can be successfully cultivated without it. To quote from one of the most enthusiastic authorities in this department, "No house was ever built, no steam engine or steamboat ever constructed, no garden ever laid out, no ship ever planned, no tunnel ever bored, no machine ever put together without its aid." It is at the foundation of all art, and is the corner stone of all industry, and as its advantages become more widely known and appreciated, we shall hear it spoken of less and less as an accomplishment, and oftener in its true position, as a study of the greatest practical importance — certainly it must be in the last relation only, that it can be taught as an obligatory study in our public schools. We may hope, perhaps, through its own work, as much as anything, the practical importance of drawing, as a study, has passed from the debatable ground. It may still be considered whether it is being conducted in the wisest manner and with the best results. Special instruction in any branch always raises the question as to its utility, and causes the comment

to be made, that if it is so important, why are not the regular teachers competent to instruct.

It may be well to remember that the law under which this instruction is given in our schools today, was only made in 1870, and yet in the short space of nine years, we find our regular teachers displaying a remarkable degree of efficiency in this department, so that we may say, with certainty, that if they are not all of them fully competent today to take this matter in hand, the time is not far distant when not only those now in the schools will be abundantly able to instruct, without special assistance, but that a knowledge of drawing will be required of persons desiring certificates, as one of the qualifications, and this condition will come about, naturally, as the scholars now passing through our schools, and under our present system, come up for examination for positions as teachers.

The free drawing school is destined, in no small degree, to take the place of a special teacher to our schools. It was particularly noticeable in the work from the public schools shown at the last exhibition, that those schools which showed the greatest proficiency, were the schools where the teachers were regular attendants at the evening drawing school.

That this school is doing a great work among us, no one who has intelligently visited the five annual exhibitions in Huntington hall, will be disposed to deny; that it is capable of and on the right road to still greater usefulness, is the hope and belief of your committee. Its value cannot be easily computed. The men and women who have been helped by it to some higher plane of usefulness that they would not have reached without such aid, unfortunately, we have no means of knowing; but we have seen enough to warrant the belief that there is no department in connection with our school system that has a stronger or better hold upon our intelligent citizens than this drawing school. The exhibitions of its work are attended by thousands and but one expression is heard, and that is of praise and confidence in its usefulness.

The results already have been remarkable, but your committee believe it will be possible in the future to carry on the work at a less expense to the city, per scholar, than ever before.

The decided favor in which the last exhibition was held by the

public, was a sufficient guarantee to the committee that there would be no falling off in interest and attendance for the present year, and that, possibly, in some branches, there might be an increased number of applicants, and as the time drew near for the opening of the school, this possibility developed into so strong a probability, that the committee felt obliged to provide for the contingency of an overflow by arranging additional accommodations. The rooms, which, up to this time, by continual planning and rearranging, as the school increased, had been forced to answer the wants of teachers and pupils, were found to be strained to their utmost limit by the school in 1878, and, as a last resort, the committee made arrangements for fitting up the hall of the Worthen street school, and for moving there the four classes in mechanical drawing; but, just at this time, a gentleman came to the committee, so highly recommended and endorsed by competent authorities, as a skilful modeller, wood-carver and artist, that they felt such an opportunity for establishing a department in modelling and wood-carving could not be neglected, so the gentleman was conditionally engaged, and the announcement made through the press, that such a class would be opened with the other departments. In the meantime the work of preparing the new rooms was going on, and before they were ready for use, the applications were handed in and the committee were astounded at finding that some over four hundred names had been presented on the opening night. This increase over previous years compelled the committee again to look around for additional room, but, finally, through the courtesy of the sub-committee of the Green school, they were granted the use of such portions of the Green school hall as they desired. Work was at once commenced, new tables provided, drawing boards, portable screens and such conveniences and apparatus as were needed, the lighting arrangements completely remodeled, and the rooms put in readiness for the present season, so that in completeness of arrangement and convenience of apparatus, we feel that the school now is in shape to do better work than ever before, while in number of departments and general character and tone of both teachers and scholars, we think the Board has reason to point with pride to the free evening drawing school of Lowell, as standing at the head of schools of like

character in the Commonwealth. A glance into the work rooms on any evening, when the school is in session, will show that we are meeting the wants of the very class of people for whom such schools are intended. It has been the desire and aim of your committee to leave no stone unturned in their constant endeavor to keep the standard of the school high, and to urge, in every manner, to the attainment of the real uses and purposes of industrial drawing.

The expenditures on account of the Drawing schools for the winter of 1878-9, were as follows :

| | |
|--|-------------------|
| Paid to teacher of classes in machine drawing | \$ 725 |
| Paid to teacher of classes in architectural drawing | 775 |
| Paid to teacher of classes in free hand drawing and practical design | 1,500 |
| Total | <u>\$3,000</u> |
| Paid to janitor | \$ 82.00 |
| “ for lighting | 176.38 |
| “ “ printing and advertising | 20.00 |
| “ “ incidentals | 49.95 |
| | <u>\$328.33</u> |
| Total expenditures | <u>\$3,328.33</u> |

Considerable expense has necessarily been incurred in furnishing the new rooms for the increased number of scholars, but such expenses are not likely to be incurred again for a number of years. There is one recommendation the committee would like to make, and that is, that the members of the Board request the teachers in the public schools to take advantage, so far as they are able, of the opportunities this school offers them for fitting themselves the better to teach this branch in their own schools; a little time spent in this way would tell immensely in the work of the scholars, and the teachers themselves would find that they were receiving immeasurably more in artistic enjoyment than was required of them in time, and the sooner our teachers begin to realize this fact, so much the sooner shall we be able to dispense with the services of a special instructor.

Industrial drawing is wisely required by the state, and the pursuit of it undoubtedly cultivates the taste and develops the

idea of beauty ; it may awaken, in many, a natural aptitude for art, existing unknown, perhaps, but aroused by this study, and the person encouraged and spurred on to high distinction, while to those less fortunate there still remains the unquestionable benefit of the refining influences to which they have been subjected. We are distinctively a manufacturing people, and a large part of our population is composed of mechanics. A large amount of our capital is invested in manufactures whose success is dependent upon skilled labor, and our increased prosperity, as a city, will be conditioned, doubtless, very much upon the amount of artistic skill we are enabled to use in our productions. It matters little what the article may be—from a bobbin to the finest carpet that leaves the loom—its market value will depend upon the amount of skilled labor that has been used. Skilled labor is the key that is to unlock the too often complicated problems arising between labor and capital, and skilled labor in the mechanical arts *cannot* be produced in any other way than through a knowledge of industrial drawing. We are but upon the threshold of this matter as yet, but it is sufficient for us to know, perhaps, that as we understand it, this question is as valuable in its bearing upon all practical matters as a study of the alphabet.

Thus, for both æsthetic and practical reasons, we are convinced that the time and money spent upon this department are wisely employed.

Respectfully submitted.

CHAS. H. ALLEN,
L. HUNTRESS, JR.,
W. S. FOOTE,
JOHN J. GREEN,
T. H. BRENNAN,

Committee on Drawing.

Lowell, January 3d, 1880.

REPORT OF THE SUPERINTENDENT.

To the School Committee of Lowell:

Gentlemen—In conformity to your rules, the following Report is respectfully submitted:

SUMMARY OF STATISTICS.

| | |
|---|--------------|
| Value of real and personal property | \$39,677,399 |
| Population (1875) | 49,677 |
| Population (estimated 1879) | 56,000 |
| Number of polls | 12,598 |
| Increase for the year | 832 |
| Number of children in the city between five and fifteen years of age, May 1, 1879 | 8,393 |
| In Ward One, 1613; Ward Two, 1088; Ward Three, 1787; Ward Four, 1267; Ward Five, 1320; Ward Six, 1318. | |
| Increase for the year | 306 |
| Number of public schools in the city | 84 |
| One High, eight Grammar, one Intermediate, two Mixed, and seventy-two Primary. | |
| Increase for the year | 5 |
| Number of teachers employed in them, exclusive of tempo- rary assistants | 153 |
| High School, two males, eight females. | |
| Grammar schools, eight males, fifty-eight females. | |
| Intermediate school, one female. | |
| Mixed schools, two females. | |
| Primary schools, seventy-two females. | |
| One teacher of penmanship and drawing for all the schools, except the Primary. | |
| One teacher of music for all the schools. | |
| Increase for the year | 8 |

| | |
|--|---------|
| Average number of scholars belonging to all the schools | 6,539 |
| High, 347; Grammar, 2,571; Intermediate, 33; Mixed, 55; Primary, 3,533. | |
| Increase for the year | 394 |
| Average attendance in all the schools | 5,964 |
| High, 335; Grammar, 2,371; Intermediate, 30; Mixed, 49; Primary, 3,179. | |
| Increase for the year | 366 |
| Average number belonging to each teacher | 43.3 |
| High, 33.3; Grammar, 39; Intermediate, 33; Mixed, 27.5; Primary, 49.1. | |
| Average per cent. of attendance | 91.2 |
| High, 96; Grammar, 92.2; Intermediate, 92; Mixed, 89; Primary, 90. | |
| Average cost of each scholar, for tuition only, based on the average number belonging | \$13.78 |
| High, \$28.20; Grammar, \$16.42; Intermediate, \$18.31, Mixed, \$20.16; Primary, \$10.25. [The salaries of the teachers of music and writing are divided among the different grades of schools in proportion to the time spent in them.] | |

RECEIPTS AND EXPENDITURES.

RECEIPTS.

| | |
|--|---------------------|
| Balance undrawn January 1, 1879 | \$ 12,629.46 |
| Appropriated and assessed | 115,000.00 |
| Received from various sources | 380.86 |
| Total amount standing to the credit of schools | <u>\$128,010.32</u> |

EXPENDITURES.

Paid for instruction to teachers in day schools, as follows:—

| | |
|--------------------------------------|--------------------|
| High school | \$9,540.12 |
| Grammar schools — Bartlett | \$5,724.50 |
| Colburn | 4,757.99 |
| Edson | 6,052.88 |
| Franklin | 4,039.65 |
| Green | 5,353.86 |
| Mann | 3,977.39 |
| Moody | 5,860.00 |
| Varnum | 4,723.75 |
| | <u>\$40,490.02</u> |
| Amount carried forward, | \$50,030.14 |

| | |
|-----------------------------------|-------------|
| <i>Amount brought forward,</i> | \$50,030.14 |
| Intermediate, No. 1 | 600.00 |
| Mixed schools | 1,100.00 |
| Primary schools | 36,177.85 |
| Teacher of penmanship and drawing | 1,108.24 |
| Teacher of vocal music | 1,120.00 |

Total paid for instruction in day schools, exclusive of Mill schools, \$90,136.23

There were also paid for Evening schools :

| | |
|--------------------------|-------------------|
| Instruction | \$3,636.00 |
| Janitors and incidentals | 875.74 |
| | <u>\$4,511.74</u> |

Evening Drawing schools :

| | |
|--------------------------|-------------------|
| Instruction | \$3,083.15 |
| Janitors and incidentals | 608.73 |
| | <u>\$3,691.88</u> |

| | |
|---|----------|
| Mill school | 123.41 |
| Janitors for day schools | 7,457.70 |
| Books for indigent children | 2,632.97 |
| Books and charts | 400.39 |
| Changing spellers and arithmetics | 430.10 |
| Fuel | 3,759.47 |
| Water | 956.69 |
| Repairs, etc. | 995.73 |
| Printing and advertising | 404.35 |
| Printing, binding and distributing School reports | 435.34 |
| Truant officers | 1,800.00 |
| Superintendent of Public Schools | 2,000.00 |
| Miscellaneous | 5,683.68 |

35,293.45

Total expenditures \$125,429.68

Balance undrawn January 1, 1880 2,580.64

\$128,010.32

SCHOOL-HOUSES.

| | |
|---------------------------------|-------------|
| Balance undrawn January 1, 1879 | \$ 2,241.51 |
| Assessed and appropriated | 20,000.00 |
| Receipts from all sources | 1,362.00 |

Amount standing to the credit of school-houses \$23,603.51

Expenditures 17,608.74

Balance undrawn January 1, 1880 \$5,994.77

SCHOOL-HOUSES.

Soon after the organization of the City Government, last January, your Committee on School-Houses met the Committee on Lands and Buildings of the City Council, and made known to them the desire of the Board for additional accommodations for the High and Edson schools, and suitable accommodations for the Primaries on Charles, Church, Kirk, Paige and Race streets. The subject was fully discussed, and subsequently the localities named were visited by both committees and by members of the Committee on Education of the City Council.

A favorable impression seemed to be made upon the members of both Committees and the reasonableness of the wishes of the Board was acknowledged. No efforts were spared to influence them to favor an appropriation sufficient to enable the Board to furnish for the schools needing them, the accommodations desired, and the Committee on School-Houses were encouraged to believe that their efforts would be successful, and that twenty-five thousand dollars, at least, would be placed at their disposal, though thirty thousand dollars would be needed.

The Board added its influence to that of the Committee on School-Houses, by appointing its Chairman, the Mayor, and the President of the Common Council, a special committee to urge upon the Committee on Appropriations the importance of making liberal provisions for School-Houses in consideration of their present and probable needs.

After all these efforts and the strongest representation, twenty thousand dollars were appropriated for School-Houses.

The Board of last year asked the City Council to remove Primary No. 20 from its location on Carter street, to some place near Whipple's grove, and to provide suitable accommodations for the scholars attending the Charles and Church street schools. It was thought best, however, after further consideration, to let No. 20 remain on Carter street, and erect a new school-house near the grove, and the Committee on Education so recommended to the City Council, while with regard to the much needed accommodations for the Charles and Church streets schools, they reported that they believed better accommodations were needed, yet they recognized the

necessity for economy in the city's expenditures during the current year, and they recommended "that the school-house on Charles street be slightly changed and removed a few feet easterly and southerly, which will place it more nearly in the centre of the school-yard, and remove it from its close proximity to offensive out-buildings on adjoining premises." The Church street school-house received no notice.

The recommendations passed the Council, and the school-house on Agawam street was built. ✓

The house on Charles street was moved, as recommended, and it stands now about ten feet farther from the offensive out-buildings than it did before.

Add, to the above, the brick addition to the Edson school-house, petitioned for in March, and the list of accommodations for scholars authorized by the City Council, is complete.

The school-house on Fourth street, in accordance with an agreement with the Fire Department, sanctioned by the City Council, was moved to the west end of River street. The room occupied by Primary No. 49, was renovated, two flights of stairs replaced the old stair-way, and a room on the lower floor was arranged for the accommodation of another school, when it is needed.

The addition of the room on Cabot street was made by authority of the Committee on Lands and Buildings, without special action on the part of the City Council. It was completed in about ten days, and shows what can be done under urgent pressure.

Requests are in the hands of the Committee on Education for *additional* school accommodations for scholars in Wards Three, Four and Five, and the High school, *and more suitable* accommodations for scholars attending Primaries No. 1 and No. 3 on Kirk and Paige streets.

The necessity for more accommodations in Ward Four are very urgent, as during the last term the Board was compelled to open a new Grammar department in the Franklin school, and provide for Primary No. 50, in the old school-house on Grand street, hired for the purpose. *Closed*

No additional accommodations will probably be needed in Wards Three or Five, as the opening of parochial schools on Suffolk and

High streets will take from the public schools in those localities a large number of children, and it is probable that some of the public schools may be discontinued in consequence, thus giving ample room for public school scholars.

Better accommodations, however, are needed near Charles street, and for the scholars in the Race street building.

The Committee on School-Houses and Hygiene have been very active during the year, and will make a detailed report some time during the year 1880, which will embrace the plans of all the school-houses and yards, with their sanitary condition, the different methods of ventilating, etc., etc.

Mr. Lord, the teacher of sciences in the High school, has, at the request of the Committee, analyzed the air in many of the school-rooms, and has made a partial report of his experiments. He found the air in the Bartlett school in a nearly normal condition, that is, not perceptibly different from that out-of-doors, which was pure.

The balance of the appropriation for school-houses, unexpended, it will be observed, is large enough for many slight improvements, but insufficient for any important purpose. It is a singular fact that the City Council appropriates money for school-houses, and puts it into the hands of guardians for the School Committee.

The expenditures for the year have been \$17,608.74, as follows :

| | |
|--|-------------|
| School-House on Agawam street | \$5,970.62 |
| Edson School, addition | 4,506.32 |
| Moving Charles street school-house | 366.73 |
| Annex to Cabot street house | 618.90 |
| General repairs and alterations | 6,146.17 |
| | <hr/> |
| | \$17,608.74 |

REFORM SCHOOL.

It is sufficient to say of this school, that it is still under the charge of Mr. Wm. A. Lang. This year completes his twenty-fifth of service in that institution. In his report to me, he says : "Feeling that many of my pupils would have but few advantages for education after leaving our school, I have made it a point to teach what would be most advantageous to them in their sphere of life." The same books are used in this as in the Grammar and Primary schools, and a systematic course of instruction is followed.

| | |
|--|-----|
| The number of different pupils instructed during the year is | 147 |
| Average monthly attendance, | 56 |
| Pupils under sentence, | 43 |
| Pupils not under sentence—males 12, females 8, | 20 |

The offences of those committed during the year were as follows :

| | |
|---|----|
| Truancy, | 32 |
| Assault and Battery, | 6 |
| Stubbornness, | 3 |
| Wandering about the streets and trespass, | 3 |
| Larceny, | 14 |

MILL SCHOOLS.

There were two Mill schools opened during the summer vacation—one on Worthen street, the other on Lawrence street. The former was under the charge of Misses McCarry and Fay, the latter under the charge of Misses Burnham and Batchelder. The schools were in session from the 14th of July to the 23d of August. The following report was received from the teachers at the close of the term :

| | WORTHEN ST. | LAWRENCE ST. |
|---|-------------|--------------|
| Whole number of scholars, | 50 | 43 |
| Average attendance, | 25 | 19 |
| Average age of scholars, | 11 | 12 |
| Number of mill certificates given, | 19 | 11 |
| Length of term, | 5 weeks. | 5 weeks. |
| Cost of the schools, not including what was paid to the Janitors, \$131.41. | | |

For the services rendered by the janitors during the months of July and August there were paid \$189. What proportion of it was on account of these schools I am unable to state. As the school-houses are under the charge of the Superintendent of Public Buildings, by the construction given to the section in the Charter relating to the same, he might very properly consider it his duty to employ his janitors to see that no harm came to the buildings while occupied for school purposes, and in such case to charge the expense of their services to schools. Fifty dollars would be the smallest sum that could reasonably be allowed for their services. It will be seen that the schools are very expensive. It is the greater from the necessity of employing two teachers to a school, because of the large number of classes of which they are composed—the scholars coming from

advanced classes in the Grammar schools as well as from the lower classes in the Primary schools. This mixing up of children from schools of different grades, and from different sections of the city, often produces great disorder. Large boys sometimes enter the schools to make mischief; and this, added to the disturbances around the buildings, make the schools very unprofitable institutions. The attendance is quite irregular, and no remedy can be applied, as in schools where attendance is compulsory. Parents have been known to shield their children from discipline by declaring that they did not know that they went to school, and that they did not require them to go. I doubt whether the good the schools do offsets the evil.

EXAMINATIONS.

The examinations held this year have been, in some respects, unsatisfactory. The Committee, for several years, have experienced difficulties in deciding upon the qualifications of applicants for schools; and, without enumerating all the causes, I may properly say, that the practice of fixing the standard of qualifications after the results of the examination are inspected, is a bad one. Questions may differ in "degrees of hardness," year by year; but that is unavoidable. Questions will appear difficult to candidates who gauge their qualifications by the requirements of preceding years. A thorough knowledge of principles will generally ensure success, while failure is pretty sure to follow cramming. This is observable in papers which contain answers to a few questions that resemble some that have appeared on previous papers, and no answers to others that are unlike them.

A certificate of qualifications to teach may be granted to a candidate who is not only incompetent, but who, from a loose habit of speaking, countenances the faults in her pupils which she should be the first to correct. It is no offence against good morals for a teacher to say, "The father hain't got no money"; but such an expression indicates much latent ignorance.

The examinations to which applicants for schools should be subjected ought to show conclusively that they have, at least, a thorough knowledge of the elements of every subject taught in the

Grammar and Primary schools, and enough more to be able to answer not less than seventy-five per cent. of the questions on every paper submitted to them, especially that on language.

It has often been asserted that the teacher of the youngest pupils should be a person of rare qualifications, whose every look, word and act is to have an important bearing upon the moulding of the character of the little beings entrusted to their care. It is quite important, also, that she should possess sufficient knowledge to elevate her far enough above her pupils to win from them the confidence and admiration her position should command.

I suggest that, if the method of examining practised in past years should be continued, the questions placed before the applicants should be carefully examined, and the standard of qualifications fixed, before the results of the examination are made known, and that no deviation from the standard be made for any reason. Also, that successful applicants should be subjected to the test of the school-room, under the inspection of experienced and successful teachers, before a full certificate of qualifications be granted them.

PRIMARY SCHOOLS.

The yearly reports from these schools make :

| | |
|--|-------|
| The average number belonging, | 3,533 |
| Increase for the year, | 206 |
| Average attendance, | 3,179 |
| Increase for the year, | 179 |
| Number who have attended no other school before this year, | 1,163 |

These figures show the necessity for more school accommodations, and for revising our school system. A casual visitor to the Primaries would judge of them as they appear, and would certainly carry away a wrong impression unless it was obtained from the manner of the teacher. The rapid increase of the population in the two years just past, with no corresponding increase in school accommodations, has produced its effect on the schools. Our practice has been to admit scholars to the Primary schools whenever they are presented. This causes great confusion at times, and is a serious interference with the best laid plans. Economy in school accommodations is often waste, and it should be kept in mind when compar-

ing schools. A thickly settled portion of the city may almost certainly be set down as a poor place for "show" schools, as they contain families who, for reasons that will readily occur to any mind, cannot, or care not to, give that attention to their children which will tend to make them cleanly, studious, or well-behaved. I think our teachers have, without exception, labored most earnestly this year for the good of the children under their care, and with much success. In some of them, the supplementary reading matter furnished has served greatly to interest their children, and confirmed me in the belief that restricting the number of reading books in any of the schools to one prescribed series is a great mistake. Children do not grow fast enough, in body or mind, to take such long strides as are often necessary when promoted to a higher grade; and they should, therefore, be supplied with more reading matter, to avoid the necessity for frequent reviews of what has already, in many cases, been learned by heart. In those schools which have been furnished with easy reading matter, the reading is more natural and more pleasing. I shall ask the in-coming Board to grant me the privilege of making further experiments in this direction.

Five new schools were established at the last meeting of the Board, and numbered as follows, viz.: Agawam street, No. 68; Worthen street, No. 69; Ford street, No. 70; Lyon street, No. 71; High street, No. 72. The first was formed chiefly of scholars attending the Carter street schools; No. 69, of the youngest scholars of Primaries Nos. 23 and 29 in the Worthen street school-house; No. 70 swarmed from the Race street schools; No. 71, from No. 59 in the Lyon street school-house; and No. 72, from the schools on Fayette street.

The Worthen street school was first opened in October, 1878, and occupied the upper entry of the building until last month, when it was moved into a room fitted up for it in the hall. The Lyon street school was also first opened in October, 1878, but occupied an adjoining room. The other schools established, were opened at different times during this year. The number of scholars reported as belonging to the schools from which these newly established schools were separated, was five hundred and fifty-seven—two hundred and fourteen of whom never attended school before.

The large number of scholars attending the lowest grades of the Primary schools made the establishment of these schools absolutely necessary, but it has imposed upon the highest grades connected with them a very heavy burden. For example, these schools are graded as follows :

Cabot and Race Streets.—Highest grade, No. 36 ; middle grade, No. 38 ; lowest grade, Nos. 10, 63, and 70.

Worthen Street.—Highest grade, Nos. 12 and 8 ; lowest grade, Nos. 23, 29, and 69.

Fayette Street.—Highest grade, No. 37 ; lowest grade, Nos. 16 and 72.

Lyon Street.—Highest grade, No. 66 ; lowest grade, Nos. 59 and 71.

It will probably be necessary to re-grade all these schools before the commencement of the next school year. The difficulties that the teachers of all these schools have met and surmounted have been fully appreciated, and they merit unqualified praise. Miss Neal, teacher of No. 10, is worthy of special mention, for her patience and persistence under difficulties that might well have caused discouragement and failure. The number of different names on her register, for the year, is 240. The average number belonging, for the term ending December 20, was 101, half of whom were French Canadians, unable to speak English. Her assistant, when the weather permitted, used the small entry, ten by twelve feet in extent, as a recitation room, until the room on Ford street was furnished for the scholars from “ Little Canada.” Considering the size of the school, its composition, the school room and other accommodations, anything approaching success there is almost marvellous.

The number of temporary assistants employed in this grade of schools, during the last term, not including those elected, is nine. The changes are five—two teachers having died, one resigned, and two promoted.

One of the schools established, No. 72, in Belvidere, was composed of scholars from the schools of the upper and lower grades, and is therefore, now an ungraded school.

All the Primaries are doing as well as could be expected under the circumstances.

GRAMMAR SCHOOLS.

| | |
|---|------|
| Average number of scholars belonging, | 2571 |
| Increase for the year, | 163 |
| Average attendance, | 2371 |
| Increase for the year, | 162 |
| Number received who have attended no other public schools | 208 |
| Received from the Primaries, | 779 |
| Sent to the High school, | 173 |

From a comparison of the number received, with the number sent out, it may be inferred that less than one-fifth of the Grammar school scholars satisfactorily complete the course of study. Granting this to be true, and what should reasonably be expected from the character of our population, it will be seen that the main business of the Grammar schools should be to prepare scholars for the common duties of life. It was for this that the method of examining scholars for admission to the High school, so long followed, was abandoned, and the present plan adopted. The old plan, it was claimed, fostered cramming by a constant drilling for examination of the scholars in the principal's class.

The plan followed for the last two years was devised for the purpose of inducing the principals of the Grammar schools to supervise, more carefully, the teaching in the lower rooms, so as to make every step in the pupil's progress, from the lowest to the highest class, easy and natural. To this end, diplomas of graduation were to be awarded to all those pupils who should properly complete the course of study, with the expectation that all the teachers would do their part towards bringing about the desired result. By the wording of the rule on this subject, the diploma was made to depend upon the rank fixed by the High school committee for admission to the High school. This served to countenance, rather than to discourage, cramming, and the desire to be permitted *to try* for admission to the High school overcame the desire to complete the course of study satisfactorily. The same pressure was brought to bear upon the masters, as in years past, with the usual consequences. This fact was apparent to all, and the further fact that the teachers of the High school declare that the scholars admitted, under the present method, have not been as well prepared as formerly, induced a com-

mittee of your number to present a new plan of examination, a part of which shall be in the principal's room, and a part in the High school house under the supervision of the High school teachers, the rank to be attained being fixed, before examination, at seventy-two per cent. of correct answers. Whether this plan will be satisfactory, remains to be seen. It will, undoubtedly, furnish the High school better scholars, though the number admitted may be smaller. Your committee in presenting the plan, hoped that the high rank recommended for adoption would excite the principals to call for increased activity on the part of their assistants.

I think it will be conceded that, while the main business of the Grammar schools is to prepare scholars for the duties of common life, at the same time the course of study should be arranged so as to make such preparation sufficient for entrance upon the High school studies. If it were found, on careful examination, that any department in the Grammar schools was not up to the standard, it would be the duty of the principal of the school to search out the cause and to apply the remedy. If the cause was "too much required to be done in a given time," a change in the course of study would be necessary; but if not, the cause would be found in poor classification, in methods of teaching or discipline, or in the misuse of time. Assistants need the help of the principal, and the principal needs the help of the assistants. That help should be freely sought and freely given. The dependence is a mutual one. A principal who complains of an assistant without furnishing evidence of having to the utmost of his power tried to instruct her upon all points where she is deficient, impeaches himself, and deserves censure for keeping a poor school. Timid and inexperienced teachers need encouragement from the principal as much as timid children do from their teachers. All working together bring about the desired results, thorough knowledge of the subjects studied, and thorough qualification for promotion to the next higher grade. Thus the whole Grammar school course will be "satisfactorily completed," and the scholar may leave school with the confidence of one who knows how much he knows and what to do with it.

It is proper here to say that a school should be judged from

what it really is and not what it may appear to be. Except under favorable circumstances and constant conditions, a Grammar school should never be judged by the number it sends to the High school. If the scholars are chiefly children of laboring people who need the help their children may give them by working in the mill, though they might be excellent scholars, few of them would finish the Grammar school course and enter the High school.

Again a school may be very large because of the number sent to it from the Primaries, in which case the number of scholars in the principal's room would be small, and the number in the lowest rooms, exceedingly large, compared with the whole number in the school. An illustration is the Edson school. The whole number of scholars attending the school during the year was seven hundred and two, one-fourth of whom were primarians, and about one-twelfth members of the principal's class. A similar state of things is likely to occur the coming year. The only thing that can reasonably be expected of this school is that the teachers should accept the situation, and perform their duties faithfully in their several departments.

The Edson has had an unusual experience the past year. One of its teachers was absent a whole year; another, nearly a year, on account of sickness. One was transferred to Primary No. 66, at her own request, for the same reason. She has not resumed her duties. The teacher of Primary No. 66 was transferred to the Edson school. One teacher was transferred from the lowest to the highest grade, and two teachers have been elected to newly opened rooms. The present number of teachers is twelve.

The Franklin school is very large. An additional department was opened in it, in September, and Primary No. 50 moved to Grand street to make room for it.

The Green school has, for a large part of the year, been under the charge of the assistants, the principal, Mr. Fiske, having been absent on account of sickness. The assistants and the scholars deserve special mention for doing their utmost to keep up the reputation of the school.

It may be said that all the Grammar schools are in a flourishing condition.

The course of study needs to be changed on account of the substitution of new editions of spellers and arithmetics for the old, and the introduction of "Elementary Lessons in English" into the lower classes. By the rules, no change in the course of study can be made before May next, but I shall propose a change soon, to meet the necessities of the case.

HIGH SCHOOL.

In my remarks upon examinations, I said that they had not been in all respects satisfactory. Three were held for admission to the High school. Two—the regular—in January and June; another—a special—the 30th of August. For the last, fifty blanks were prepared. At least twenty applicants were expected, and only three appeared,—one, a non-resident; one, who had lived in the city but a few weeks; one from a private school. The first was not allowed an examination; only the second passed. Two hundred and forty-four scholars were examined in January; one hundred and eighty-two in June, seven of whom were not examined in January. These examinations were unsatisfactory; first, because in some schools, scholars not in the principal's class were examined; secondly, because the rank obtained by the seven who were examined in June, and not in January, in five important studies, was doubled, which was an advantage over those who took the January examination. Besides these, there exists one other reason for dissatisfaction in the fact that many of those admitted on the rank required, proved unable to acquit themselves creditably after entering the school. Scarcely one admitted by special vote attained a medium rank. The principals of the Grammar schools, under the pressure of parental pleadings and the necessity of making room for those that are in the classes below, sometimes send scholars to the High school who they know are not well qualified. They would gladly add another year to the Grammar school course, but with the present school accommodations it would be impossible. In reply to a request for information upon the subject here presented, Mr. Chase, principal of the High-school, has sent me the following communication:—

COMMUNICATION FROM MR. CHASE.

It is a general complaint among the High schools of the state, that too many of their pupils were admitted before they were qualified to enter upon a High school course. This evil increases from year to year. The natural desire for promotion, the mortification at a failure to pass the examination for admission, the haste which many feel to complete what seems to them a long and tedious course of study,—all conspire to bring upon the School Board a very strong pressure to induce them to admit to the High school, candidates of too low attainments. The result is a crowded condition of the school, and the necessity of “putting back,” at the end of the year, a very large number to pursue for a second time the studies of the first year.

For example: At the close of the last half-year, in July, there were in the first-year class alone, one hundred and twenty-three cases of “putting back” upon the studies of that half-year. The number of individuals, however, thus treated, was not so great, because some were “put back” in two or even three different studies.

The teachers of the High school ought not to be compelled to resort to this remedy for the evil complained of, but it is our only recourse for securing the best good of the pupils themselves, as well as for sustaining the tone and efficiency of the instructions which we give.

The ill effects upon the High school itself, of these too early admissions, have been so often urged, that I now propose to speak of the far greater injustice done to the Grammar schools, and to the pupils themselves, who are thus admitted.

That what I shall say may have a basis of facts, I take the examination papers of the only nine scholars now in the school, who belong to the class of candidates, who, in 1879, were admitted by reducing the standard for admission from 100 to 90, and the complete results of whose last examination I have at hand. In order to be concise and, at the same time, to be fair, I will present in detail only the results of the examination of the average scholar of the nine; *i. e.*, the fifth in point of excellence.

Of ten words given in spelling, he writes five, as follows: *Delicious, Anniversary, Auspicious, Ubicuctous, Inafficiant.*

Of ten questions in arithmetic, he makes a half-failure upon one, and a total failure upon the four following:—

(1.) The area of a rectangular piece of land is five acres, and the length of the piece is to its breadth as 5 to 1. What are the length and breadth?

(2.) A gentleman left his son an estate, 1-5 of which he spent in six months, and 3-4 of the remainder in one year more, when he had only \$1500 left. What was the value of the estate?

(3.) One gallon of coloring liquid, 3 gallons of sulphuric acid, and 4 gallons of water, are mixed together. What per cent. of the mixture is sulphuric acid?

(4.) If 378 is 9 per cent. of a certain number, what is 1-2 of the same number?

Of the ten questions in history, only five, and of the ten in grammar, less than one-half were correctly answered, while in geography he was more successful.

His marks of credit in penmanship, reading, and drawing, in which all candidates are wont to receive a high rank, and which demand but little of mental discipline and maturity of judgment, constitute a very large portion of his claims for admission to the High school.

Now, when we consider that the spelling book from which the words for the examination are, and must be, taken, is a little book, containing less than one-twentieth of the words in our language; that a very considerable part of the arithmetic used in the Grammar schools is not required for admission to the High school; that the text-book in grammar is a work of very diminutive size; that all the history required is only the history of a single country,—our own; when, also, we consider that even in these four fundamental studies, this boy answered correctly only one-half of the questions put, does it seem fair and just to the boy himself to transfer him from a school in which these branches are taught, and advance him to the study of algebra and the other branches of a High school course? As long as he believes that our common words, *delicious*, *efficient*, and *ubiquitous*, are *delictious*, *afficiant*, and *ubicuetous*, is it just to him to excuse him from the further study of spelling? Should a boy who cannot tell what per cent. 3 is of 8, or what is 50 per cent. of a number of which 9 per cent. is 378 (as in questions 3 and 4 above) be taken from the study of arithmetic and put to that of algebra? When he becomes a man and learns, with mortification, his defects in the knowledge so essential in a life of business, will he thank us for thus abusing him?

Again, is it fair and just to our Grammar schools continually to rob them thus of their most advanced pupils, as soon as they can answer one-half of the easy questions put to them on their studies? Shall these schools have no completeness in themselves, but be regarded merely as feeders, with crude materials, of another school? Shall they regularly leave their work half done?

I ask the parents: "Will you not, before demanding of the School Board that your children shall be advanced from the common to the higher and less practical studies, stop to inquire whether you are not demanding what may be to them the greatest injury?" I ask our men of business: "Is it for such an education as that described above, that you generously pay your money to sustain the public schools of Lowell?"

A new plan of examining candidates for admission to the school has been submitted for the consideration of the Board, which I hope will be acted upon in season for trial the coming year. One of the features of the new plan is, to make reading, writing, drawing, and music subjects of examination in the schools by their appropriate committees and the Superintendent, and spelling, geography, history, arithmetic and grammar in the High school, under the supervision of the High school teachers as formerly. The advantages of returning to this modification of the old plan are uniformity and impartiality. If there be added the fixing of a standard from the character

of the questions asked, and not from the tabulated results, and a refusal to admit to the High school any who do not come up to the standard, it is believed that parents and children will be better satisfied than they have been for the two years past.

By the statute, the city of Lowell is obliged to maintain a High school, the teacher or teachers of which "shall be competent to give instruction in general history, book-keeping, surveying, geometry, natural philosophy, chemistry, botany, the civil polity of this Commonwealth, and of the United States, the Latin, Greek, and French languages, astronomy, geology, rhetoric, logic, intellectual and moral philosophy, and political economy." The array of subjects is an imposing one, but not above the abilities of the teachers of our school.

There are two purposes for which a High school may be established: the one, to receive scholars that have gone through the Grammar schools, and wish for a year or two's instruction in some of the branches not taught in those schools; the other, to give an education which will qualify a person for business, for society, or for admission into the best college in the land. The Lowell High school has stood among the foremost in the state. It is important that its standing should not be lost sight of. It may maintain its high rank by the selection of competent instructors when vacancies occur, by the discharge of incompetent ones when they prove themselves to be such, and by requiring a high standard of admission. It may be forced into the rank of ordinary private schools when it lacks the fostering care of this Board, and the proper appreciation of the community.

The graduating exercises were held this year on the evening of the second day of July, in Huntington Hall.

Diplomas of graduation were presented to the following graduates:—

FOUR YEARS' COURSE.

Charles Christopher Baron.
David Dana Bartlett.
John Edward Gallagher.
Edward Jenkins Harlow.
Charles Prosser Nichols.
James Joseph O'Grady.
Oliver Cheever Semple.
Edward Horace Shattuck.

Benjamin Franklin Stevens.
Fanny Crawford Burnham.
Helen May Cole.
Martina Abiah Gage.
Carrie Frances Morey.
Annie Survinah Morse.
Isabelle Adams Perkins.
Mary Greenleaf Stevens.

THREE YEARS' COURSE.

Henry French Eastman.
Charles Francis Harris.
Charles Benjamin Frederic.
John Andrew Gateley.
Henry Theodore Gilday.
Frank Hanchett.
George McClellan Harrigan.
Charles Churchill Hartwell.
George Forrest Martin.
Isaac Herbert Place.
John Fred Sargent.
Fred. Harvey Taylor.
Edward John Welch.
Fred. Alexander Wilcox.
Effie Gertrude Adams.
Grace Emery Besse.
Lizzie Thornton Buss.
Minnie Belle Chase.
Josie Capitola Coburn.

Edna Abbie Foster.
Mary Susan Gerry.
Nellie Maud Goodwin.
Nellie Julia Gorman.
Katie Belle Hallowell.
Georgiana Harnden.
Catherine Wingate Horne.
Lulie Augusta Huntoon.
Alice Fessenden Lawrence.
Annie Maria Lee.
Marietta McEvoy.
Katie Theresa Murphy.
Almira Annette Perley.
Sophia Loud Raymond.
Blanche Gertrude Richardson.
Athelinda Ardella Trask.
Sarah Louise Upton.
Etta Belle Wright.

The Carney Medals were presented to

Edward J. Harlow,
Oliver C. Semple,
Benjamin F. Stevens,

Martina A. Gage,
Helen M. Cole,
Almira A. Perley.

Diplomas and Medals were presented by the Mayor, J. A. G. Richardson, Esq.

By some oversight the names of the recipients of the Medals, in 1878, did not appear in the annual report. They were

Edward E. Sawyer,
William E. Holmes,
William A. Eastman,

Ida E. Bisbee,
Florence C. Adams,
Mary A. Choate.

For list of Medal scholars from 1859, see appendix A.

CHANGES IN SCHOOLS.

TRANSFERRED.

| | | |
|-------------------|-----------------------|---------------------|
| Helen A. Bowers, | from Edson School, | to Primary No. 66. |
| Ella M. Plumado, | from Franklin School, | to Primary No. 6. |
| M. Jennie Keese, | from Green School, | to High School. |
| Alice M. Clark, | from Primary No. 6, | to Franklin School. |
| Rosalie T. Burns, | from Primary No. 66, | to Edson School. |

RESIGNED.

| | |
|----------------------|-----------------|
| Helen L. Ham, | High School, |
| James S. Russell, | High School, |
| Sarah F. Dillingham, | Varnum School. |
| Nellie S. Danforth, | Primary No. 55. |

ELECTED.

| | |
|----------------------|---------------------|
| Rose A. Jordan, | to High School. |
| Kate F. Hayes, | to Edson School. |
| Nellie Keefe, | to Edson School. |
| Mary F. Burnham, | to Franklin School. |
| R. Alice Johnson, | to Green School. |
| Minnie F. Wing, | to Varnum School. |
| Mary L. McSorley, | to Primary No. 20. |
| Mary F. Beane, | to Primary No. 47. |
| Stella J. Allen, | to Primary No. 55. |
| Mary McLaughlin, | to Primary No. 68. |
| Marietta F. Crowley, | to Primary No. 69. |
| Abbie V. Wheeler, | to Primary No. 70. |
| Ida F. Hardy, | to Primary No. 71. |
| Anna Kohawn, | to Primary No. 72. |

REMINISCENCE.

James S. Russell, who declined to be again a candidate for re-election, was first elected assistant in the High school, April 23, 1835. Franklin Forbes was elected principal at the same meeting. The gentlemen composing the School Committee were Theodore Edson, Thomas B. Thayer, Eliphalet Case, John W. Graves, John D. Pillsbury, John Aiken, and John Clark,—three clergymen, two physicians, the agent of the Lawrence mills, and the agent of the Merrimack mills. At this period there were one

High school, three Grammar schools, and fourteen Primary schools. The whole number of teachers was thirty, viz.: two in the High school, twelve in the Grammar schools, fourteen in the Primaries, and two writing masters. Ten of the number were men, five of whom are living, viz.: Joshua Merrill, Moses F. Eaton, S. R. Hanscom, E. B. Patch, and James S. Russell. The only surviving member of the School Committee is the Rev. Dr. Edson, rector of St. Anne's church. The valuable services of Mr. Russell, extending over so long a period, will be remembered for many years by those whose privilege it was to be under his instruction. He was regarded by all who knew him as prominently faithful as a teacher, and on declining to be a candidate for re-election, the Board passed a complimentary resolution, in which they expressed "their appreciation of his fidelity, and testified to his ability as a teacher, to his unwearied devotion to the duties of his position, to his ardent love for his profession, and to the numerous evidences of his success, during these many years of arduous and faithful service; and they also assured him that it was the sincere wish of every member of the Board, that a long life and an unalloyed prosperity might be granted him, and that he might continue to enjoy that respect and confidence of the community, which as a faithful teacher, and as a citizen, he so richly deserved."

DEATHS.

Miss Susie J. Perkins, teacher of Primary No. 20, died, January 14th, of pneumonia, after a short sickness. Miss Perkins was elected in 1871. She was a young lady of rare accomplishments, and much beloved by a large circle of friends. She was a faithful and devoted teacher.

Miss Miranda W. Bradley, teacher of Primary No. 47, died, July 26th. Her sickness was long and painful, but she endured her sufferings with patience and fortitude. She was a native of that part of Dracut which is now Centralville. She was elected a teacher in 1852, and "in her death, the city lost one of its most faithful and efficient teachers, and the friends of education, an ardent and progressive worker." She was highly esteemed by all who knew her.

ATTENDANCE.

The attendance in the different grades of schools may be learned from the table in the appendix marked I, and from the following report of the truant officers :—

ANNUAL REPORT OF TRUANT OFFICERS, FOR THE YEAR
ENDING DECEMBER 31, 1879.

| | |
|--|-------|
| Whole number cases investigated | 2,308 |
| Absentees | 1,563 |
| Truants | 484 |
| Juvenile offenders | 66 |
| New scholars | 79 |
| Working overtime, and without certificates | 86 |
| Found to be over fourteen years old | 30 |
| Returned to school a second time | 247 |
| Returned to school a third time | 137 |
| Arrested and brought before court | 30 |
| Sentenced | 14 |
| Bailed | 16 |
| Working certificates given to minors under sixteen years old | 989 |

It will be seen by the above report that the number of absences from school has been about the same as last year, and also the reasons for such absences have been nearly the same as then existed.

Although there has been a general improvement in business matters everywhere, yet the fact remains the same, that, as then, poverty and destitution is unpleasantly manifest in hundreds of families, and that it is too often the case that an utter inability on the part of the parents to properly clothe their children, during the cold and wet months, prevents many from attending school, who otherwise would doubtless be more constant than their record shows. In looking up the absentees, the officers often find the trouble to be with the parents, who are quite too easy with their children, allowing them to stay from school on very slight pretexts, or apparently for no cause at all, only that the child thinks he is not well enough to go to school; has a little cold, toothache, or something else, yet such children will often be found playing in

the backyards or alleys, with permission from the parents, who forget that the comfort and warmth of the schoolroom is a much safer place than outdoors, for their children, when sick(?). It would seem that many such parents should be the actual subjects of discipline. The rules of the Board of Health, relating to contagious diseases, such as scarlet fever and diphtheria—by which all children of families or tenements where such cases exist, are withdrawn from school—have been strictly enforced by the truant officers (all such cases having been reported to them from the Board of Health) and have had not a little to do with the record of absentees, in many of the schools, during the year. Over two hundred families have thus been notified for the year.

Truancy is, to a large extent, a result of laxity of proper home training on the part of parents, and of consequent unwholesome home influences; and because it is not altogether so much the fault of the child, as it is the result of such influences, the extreme penalty of the law is not so often carried out as the number of cases examined would seem to demand.

As will be seen, a large number of mill certificates have been given, nearly, if not quite one-half of those who have received them being French Canadians, of whom the influx into the city during the year has been unusually large.

The mills have been visited during each school term, and the corporations are very generally found working in entire harmony with the statute laws, relating to the employment of school children and minors under sixteen years of age.

Respectfully submitted.

BICKFORD LANG.
ROBT. L. READ.
WM. H. BERMINGHAM.

CONCLUSION.

There have been twenty-one meetings of the Board, during the year; twenty-nine amendments have been made to the Rules, notwithstanding they were, in the last year's report, declared to be completely revised. The amendments are so many, that I recommend that another edition of the Rules, revised and corrected, be printed for the use of the Committee and teachers.

Two of the important matters brought before the Board this year are free text books and ventilation. They should be early considered by the incoming Board, and definitely disposed of.

I acknowledge again my obligations to all the members of the Committee for continued courtesies.

CHARLES MORRILL,

Superintendent of Public Schools.

APPENDIX.

APPENDIX.

A.

LIST OF CARNEY MEDAL SCHOLARS.

1859.

FREDERIC T. GREENHALGE.
AUGUSTUS MIXER.
THOMAS P. SHAW.

SUSAN C. CROSBY.
ELIZABETH G. HANKS.
JANE E. HORNER.

1860.

JOHN B. SMITH.
HENRY A. WORCESTER.
JOHN C. PROCTOR.

ELIZABETH B. RUSSELL.
SARAH J. TAY.
ELIZABETH F. CROSBY.

1861.

WARREN S. CHASE.
GEORGE B. ALLEN.
HENRY A. METCALF.

CYNTHIA G. MELVIN.
HELEN M. HUNT.
MARY E. HARDMAN.

1862.

WILLIAM H. COOKE.
CHARLES F. KING.
GEORGE F. WOODWARD.

NELLIE A. WHITTIER.
JULIA M. HEALY.
MARY E. TULLOCK.

1863.

HORACE T. CURRIER.
STEPHEN H. KING.
STEPHEN G. BAILEY.

LIZZIE WRIGHT.
ANNA M. CHASE.
MARIANNA OCKINGTON.

1864.

RUFUS K. WOOD.
ALFRED G. LAMSON.
GEORGE F. LAWTON.

HELEN M. GALLAGHER.
ELIZABETH A. McARTHUR.
EMMA F. SMITH.

1865.

CHARLES P. SPALDING.
FRANK E. FITTS.
EDWIN H. COOKE.

ELLA P. CLIFFORD.
CLARA E. BAILEY.
IDA A. HILL.

1866.

EDWARD A. BENNER.
JOHN J. GREEN.
FRANK F. COBURN.

ANNIE A. BURKE.
MARCELLA M. PATTEN.
MARY L. ALLEN.

1867.

CHARLES RUNALLS.
FRANK W. S. DALY.

ISABEL T. VINALL.
MARTHA A. PAUL.
IDA SHELDON.

1868.

GILBERT A. A. PEVEY.
FRANK T. BENNER.
EDGAR W. LONG.

HELEN E. PARKER.
MARGIE T. McARTHUR.
CHARLOTTE M. FURNALD

1869.

FRED LAWTON.
JAMES W. FORD.
GEORGE H. STEVENS.

EMILY I. WHITE.
MARY A. BOYDEN.
LAURA E. HALE.

1870.

EDWIN A. COLBY.
JOSEPH P. GRAY.
JAMES W. GILMAN.

CARRIE E. BACHELLER.
JULIA S. BENNETT.
SARAH E. STEVENSON.

1871.

WILLIAM R. HARLOW.
RALPH F. BRAZER.
SAMUEL T. BARNES.

STELLA J. ALLEN.
HELEN L. HAM.
ELLEN A. STILLINGS.

1872.

ERNEST J. HARDMAN.
HENRY O. BROOKS.
CHARLES N. WAITE.

M. JOSEPHINE DRACH.
ADELAIDE BAKER. ✓
NELLIE F. HOWE.

1873.

WILLIAM A. FAVOR.
HERBERT S. JOHNSON.
GEORGE S. MOTLEY. ✓

ALICE M. CLARK.
NELLIE M. FREEMAN.
HELEN A. NICHOLS.

1874.

CHARLES F. COBURN.
WILLIAM A. BURCH.
HARRY V. HUSE.

ALICE F. FRENCH.
AGNES GORDON.
MINNIE C. SMITH.

1875.

FRED G. DALY.
WILLARD B. GODDARD.
WALTER M. LANCASTER.

ADDIE L. GIBSON.
LUCY L. SPALDING.
ROSE A. JORDAN.

1876.

JAMES E. GIBSON.
GEORGE M. WARD.
AZRO M. DOWS. ✓

ANNE M. GODING.
ELIZABETH F. BRICKETT.
MARY F. BEANE.

1877.

FRANK H. PULLEN.
CHARLES L. ABBOTT.
WILLIAM F. DAVIS.

ADDIE LYFORD.
HATTIE E. MOREY.
JENNIE EMERSON.

1878.

EDWARD E. SAWYER.
WILLIAM E. HOLMES.
WILLIAM A. EASTMAN.

IDA E. BISBEE.
FLORENCE C. ADAMS.
MARY A. CHOATE.

1879.

EDWARD J. HARLOW.
OLIVER C. SEMPLE.
BENJAMIN F. STEVENS.

MARTINA A. GAGE. ✓
HELEN M. COLE.
ALMIRA A. PERLEY.

RULES FOR THE AWARD OF CARNEY MEDALS.

I. There shall be neither more nor less than six medals annually conferred.

II. They shall be restricted to members of the graduating class, in either the three or four years' course; but the awards shall be based on general excellence throughout the course, and not have exclusive reference to the final year.

III. Three shall be bestowed on that number of young ladies who excel in all that constitutes a good scholar, and three on young gentlemen, similarly.

IV. The elements of good scholarship to enter into the account shall include correct deportment, punctuality of attendance, and rank in daily recitations.

V. Precedence shall be given to excellence in a thorough English education over classical accomplishments.

VI. The principal of the High school shall, annually, under direction of the committee on High school, prepare a list of the graduates who are, in the judgment of himself and his subordinate teachers, entitled to the medals, according to the provisions of these rules; but the ultimate decision shall rest with the committee.

VII. The practice of making "honorable mention" of pupils who fail of attaining medals is not provided for by Mr. Carney's donation, or by any rule of the School Committee.

B.

SALARIES OF TEACHERS.—ADOPTED JULY, 1879.

HIGH SCHOOL.

| | |
|-----------------------------------|------------|
| Principal | \$1,800.00 |
| Male Assistant | 1,600.00 |
| First Female Assistant | 700.00 |
| Other Female Assistants | 600.00 |

GRAMMAR SCHOOLS.

| | |
|--|------------|
| Principal (males) | \$1,400.00 |
| Principal (females) | |
| Assistants—First Year | 400.00 |
| Assistants—Second Year | 450.00 |
| Assistants—Third Year, and after | 550.00 |
| Teacher of Penmanship | 1,000.00 |
| Teacher in Vocal Music | 1,000.00 |
| Teacher of Intermediate School | \$600.00 |

PRIMARY AND MIXED SCHOOLS.

| | |
|--|----------|
| Teachers—First Year | \$400.00 |
| Teachers—Second Year | 450.00 |
| Teachers—Third Year, and after | 550.00 |

TEMPORARY TEACHERS.

| | |
|---|--------|
| Male Teachers—For every schoolday's service | \$3.00 |
| Female Teachers in High School—For every schoolday's service | 1.75 |
| Female Teachers in other Schools—For every schoolday's service, | 1.00 |
| After three months' service | 1.25 |

EVENING SCHOOLS.

| | |
|---|--------|
| Male Principal — Per evening | \$2.00 |
| Female Principal — Per evening | 1.25 |
| Female Assistants — Per evening | 1.00 |

C.

SERIES OF QUESTIONS PROPOSED FOR THE EXAMINATION OF APPLICANTS TO ENTER THE HIGH SCHOOL.

JANUARY EXAMINATION.

QUESTIONS IN HISTORY.

1. Give an account of the voyage made by Amidas and Barlow.
2. Give an account of the attempt to make a settlement at the mouth of the Kennebec River.
3. Why did Charles II declare the Charter of Massachusetts void?
4. What two settlements did the Dutch West India Company make in 1623?
5. Mention three important events of the French and Indian War.
6. What was the Boston Port Bill? and why was it passed by Parliament?
7. Who were called *loyalists* during the Revolution? and by whom were they so called?
8. How many Colonies united in the Declaration of Independence?
9. Where was Washington inaugurated President of the United States? Adams? and Jefferson?
10. Who was chosen Vice President in 1800? and by whom?

QUESTIONS IN GEOGRAPHY.

1. Bound New York.
2. What three streams enter Chesapeake Bay?
3. Name the Atlantic States.
4. Into what groups may the States of the Union be divided, according to their position?
5. What can you say of the waters of New England?
6. What large city at the eastern end of Lake Erie?
7. Which is the largest city on the Mississippi between St. Louis and New Orleans? and in what State is it?
8. What can you say of the soil of the Central States?
9. Through what waters would a vessel pass in going from Bangor, Me., to Richmond, Va.? and what would probably be her cargo.
10. Name the capitals of the New England States.

QUESTIONS IN GRAMMAR.

1. What is an improper triphthong? Give an example.
2. Write the plurals of *berry*, *stratum*, *knave*, *son-in-law*, *handful*, *beau*.
3. Compare *serene*, *late*, *useful*, *many*.

4. That hat is *hers*. Parse *hers*.
5. Give an example of an *intransitive* verb with a *passive form*.
6. *Had he tried, he might have learned his lesson*. In what mode and tense is each verb?
7. Write a sentence containing a *perfect active participle*.
8. Into what four general classes may *adverbs* be divided? Give an example of each.
9. Give a synopsis of the verb *hurt* in the *passive voice, indicative mode, second person, singular number*.
10. Give an example of a *complex sentence*, one of a *compound sentence*, and state how they differ.

QUESTIONS IN ARITHMETIC.

1. Add together three thousand forty, and seven thousandths; six million seven hundred, and fifty-one ten thousandths; eighteen, and two billionths.
2. What principal at 8 per cent. will amount to \$240 in 2 years 6 months.
3. Reduce $\frac{3}{8}$ of a pint to the fraction of a gallon.
4. What is $\frac{1}{4}$ of ($1\frac{1}{2}$ of $\frac{1}{2}$ x $\frac{2}{3}$ of $2\frac{2}{3}$)?
5. 30 is $1\frac{1}{5}$ per cent. of what number?
6. In adding proper fractions of different denominations, what is the first thing to be done? and why?
7. If it takes $2\frac{2}{3}$ yards of cloth $1\frac{1}{2}$ yards wide to make a suit of clothes how many yards $\frac{3}{4}$ yard wide would it take to make three suits?
8. What is the interest of \$250.32 for 1 year, 11 months, 25 days, at 3 per cent.?
9. What cost 472 feet of boards at \$14 $\frac{1}{2}$ per M?
10. Divide $\frac{3}{4}$ by $\frac{5}{9}$ and explain the process.

SPELLING.

Compatible. Pert. Imbrue. Rubies. Clarifies. Saltpetre. Auricular. Tortuous. Gorgeous. Menace. Emanate. Mahogany. Hysterics. Artesian. Stampede. Palatial. Menial. Typhoid. Perquisite. Scurrilous.

JUNE EXAMINATION.

QUESTIONS IN HISTORY.

1. How did New England get its name?
2. What important change took place in the government of Massachusetts Bay Colony in 1629? and what resulted from it?
3. What was the *War of the Revolution*? When and where was the first blood shed?

4. What was the chief objection to the admission of Texas into the Union in 1845?
5. In what year were the two territories, Kansas and Nebraska, organized? and what followed immediately after?
6. Who was commander in chief of the army of the Union at the breaking out of the civil war?
7. Who commanded the army of the Potomac at the first battle of Bull Run? Who at the second?
8. Give the names, in order, of the several generals who commanded the same army, from the second battle of Bull Run to the battle of Gettysburg.
9. Who was the commander of the national forces in the southwest in 1863? What was his chief object? and how was it accomplished?
10. When was General Grant made Lieutenant General of the Union forces? and why?

QUESTIONS IN GEOGRAPHY.

1. How do we describe the exact position of a place on the globe?
2. Through what waters should a vessel pass in going from Constantinople to Calcutta by the shortest route?
3. Bound France.
4. What continents are mostly in the torrid zone?
5. What can you say of the surface of Holland? Give its capital; also its largest city.
6. Where is Egypt? for what is it famous? and what large river flows through it?
7. What great mountain system at the north of India?
8. What three great streams drain the plains of northern Asia?
9. In what part of India is Bombay?
10. Draw a map of New England, and locate Boston, Burlington, Worcester, and Providence.

QUESTIONS IN GRAMMAR.

1. Write the principal parts of *shut*, *slay*, *shoe*, and *work*.
2. Write a sentence containing a regular verb in the future perfect tense, indicative mood.
3. Transpose the following:

"They would have thought who heard the strain,
They saw in Tempé's vale, her native maids,
Amidst the festal-sounding shades,
To some unwearied minstrel dancing."

4. Parse *would have thought*.
5. Parse *amidst*.
6. Parse *to*.

7. Write out fully the following sentence: *If I'd tried to get my lesson, he'd have been glad to help me.* Give the mood and tense of the two *finite verbs*.
8. What is the rule for forming the plural of nouns ending in *y*?
9. Decline *she, miss, myself*.
10. Write a sentence containing an adverb of *place*; of *time*; of *cause*, and of *manner*.

QUESTIONS IN ARITHMETIC.

1. Reduce to a simple fraction $\frac{2\frac{1}{2}}{\frac{7}{8}}$ of $5\frac{1}{8}$ of 9.
2. What is the present worth to-day (June 20th) of a note for \$436, payable the 15th of August next, money being worth 4 per cent. per annum?
3. How many rods of fence will be necessary to fence 640 acres of land in a square form?
4. The area of a rectangular piece of land is 50 acres, and the length of the piece is to its breadth as 5 to 1; what are the length and breadth?
5. A gentleman left his son an estate, $\frac{1}{5}$ of which he spent in six months, and $\frac{3}{4}$ of the remainder in one year more, when he had only \$1500 left; what was the value of the estate?
6. At what per cent. will \$4500 gain \$56.25 in one year?
7. One gallon of coloring liquid, 3 gallons of sulphuric acid, and 4 gallons of water are mixed together; what per cent. of the mixture is sulphuric acid?
8. If 378 is 9 per cent. of a certain number, what is $\frac{1}{2}$ per cent. of the same number?
9. If 6 men, in 16 days of 12 hours each, build a wall 15 feet long, 8 feet high, and 3 feet thick, how many men will be required to build a wall 45 feet long, 9 feet high, and 6 feet thick, in 25 days of 9 hours each?
10. Divide $\frac{5}{6}$ by $\frac{8}{9}$, giving the reason for each step in the process.

SPELLING.

Cartilage. Irksome. Horde. Delicious. Anniversary. Auspicious.
Ubiquitous. Grate. Inefficient. Courtesy.

D.

TEXT-BOOKS USED IN THE PUBLIC SCHOOLS.

Hillard's Readers, Franklin Series.

PRIMARY SCHOOLS.

Primer; Second Reader; Third Reader; Franklin Primary Arithmetic; Smith's Drawing Cards.

GRAMMAR SCHOOLS.

Fourth Reader; Intermediate Reader; Fifth Reader; Sixth Reader; Eaton's Common School Arithmetic; Bradbury's Eaton's Practical Arithmetic; Greene's Grammar; Guyot's Elementary Geography; Guyot's Intermediate Geography; Anderson's Common School History of the United States; Worcester's New Pronouncing Spelling Book; Gilbert's Graded Test Speller; Colburn's First Lessons in Arithmetic; Duntonian Writing Books; Smith's Drawing Books; Hooker's Child's Book of Nature permitted as a reading book.

HIGH SCHOOL.

Allen and Greenough's Latin Grammar, Cæsar, and Virgil; Leighton's Latin Reader; Andrews' Latin Lexicon; Goodwin's Greek Grammar; Goodwin's Greek Reader; Boise's Homer; Liddell and Scott's Greek Lexicon; Eaton's Algebra; Bradbury's Geometry and Trigonometry; Davies' Surveying; Otto's French Grammar; Otto's German Grammar; College Plays, by Bocher; Spier's French Dictionary; Berard's History of England; Pennell's Ancient Greece and Rome; Greene's English Grammar; Hart's Composition and Rhetoric; Quackenbos' Composition; Underwood's Handbook of American Literature; Brooke's English Literature; Swinton's Outlines of History; Martin's Civil Government; Winslow's Intellectual Philosophy; Wayland's Moral Science; Norton's Natural Philosophy; Steele's Chemistry; Kiddle's Astronomy; Dana's Geological Story; Wood's Botany; Dalton's Physiology; Warren's Physical Geography; Mitchell's Ancient Geography; Fourth Music Reader; Webster's and Worcester's Dictionaries; Berlstein's Qualitative Analysis.

E.

COURSE OF STUDY FOR THE PRIMARY SCHOOLS.

FIRST YEAR.

Sixth Class—First Reader. Commence by using letter and word cards, and Hillard's or Monroe's Reading Charts.

Spell the words in columns, by letters and by sounds.

Develop the idea of number to ten, by the use of objects. Count to one hundred on the numeral frame.

Teach the construction of letters and figures, and the simplest form of script letters, using slate and blackboard.

Fifth Class—First Reader. Spell as in *Sixth Class*, using Charts as in *Sixth Class*.

Teach Roman numerals to L.

Print words and figures.

Add and subtract small numbers, using the numeral frame and objects.

SECOND YEAR.

Fourth Class—Second Reader. Practise "Enunciation Exercises" daily.

Spell, by letters and by sounds, words in columns and in reading lessons.

Continue to teach the simplest form of script letters.

Teach Arithmetic orally.

Third Class—Second and Third Readers. Practise "Enunciation Exercises" as in the *Fourth Class*.

Teach the simplest form of script letters as in the *Fourth Class*.

Teach Arithmetic to page 40, and the multiplication table to 8 x 8.

THIRD YEAR.

Second Class—Third Reader. Daily practise of exercises in enunciation. Spell words in columns and in reading lessons, by letters and by sounds. Teach the meaning of the words found in the reading lessons, and require scholars to use their own language in defining. Correct all faults in expression.

Teach all script letters, and require short words to be written from dictation.

Review the Arithmetic and go to page 60.

First Class—Third Reader. Exercises in enunciation, spelling, definitions, etc., as in *Second Class*.

Write three words of each spelling lesson, and criticise carefully the form of each letter; also encourage the writing of short sentences.

Review and complete the Arithmetic, if found practicable.

Drawing should be taught in all the classes except the *Sixth*.

In each school a few minutes should be devoted at every session to physical exercises and lectures on objects.

F.

COURSE OF STUDY FOR THE GRAMMAR SCHOOLS.

FIRST YEAR.

Eighth Class—Fourth Reader. Especial attention should be given to the Introductory Exercises, and to the lessons in spelling and defining at the beginning of each reading lesson.

Worcester's New Pronouncing Speller.

Guyot's Elementary Geography, to Part 2.

Colburn's First Lessons in Arithmetic, to sec. 4, page 63, omitting the 52 questions in sec. 3, C.

Written Arithmetic, from dictation, numeration and notation, addition and multiplication; amounts not to exceed a million.

Seventh Class—Fourth Reader; Introductory Exercises, spelling and defining as in Eighth Class.

Worcester's New Pronouncing Speller.

Guyot's Elementary Geography, to Part 3.

Colburn's First Lessons, sections 4, 5, and 6, and 50 questions in sec. 3, C.

Written Arithmetic, from dictation, numeration and notation, addition and multiplication, subtraction and long division, not to exceed three periods. In subtraction, not more than two figures in the minuend to be less than the figures below them, and in division the divisor not to exceed 25.

SECOND YEAR.

Sixth Class—Fourth Reader,* spelling and defining and Introductory Exercises, as far as Inflection.

Worcester's New Pronouncing Speller.

Guyot's Elementary Geography, to Africa.

Colburn's First Lessons, from C, in sec. 6, to sec. 9, page 94, with 70 questions in C, sec. 3.

Arithmetic, to Properties of Numbers.

Fifth Class—Hillard's Intermediate Reader,* with daily drill on the Introductory Exercises.

Worcester's New Pronouncing Speller.

Guyot's Elementary Geography, completed and reviewed.

Colburn's First Lessons, sections 9, 10, and 11, and C, sec. 3.

Arithmetic, to United States Money.

*Child's Book of Nature permitted as a reading book to alternate with the Intermediate Reader, in the Sixth, Fifth, Fourth, and Third Classes.

THIRD YEAR.

Fourth Class — Hillard's Intermediate Reader.* Daily drill as in Fifth Class.

Worcester's New Pronouncing Speller; oral and written exercises.

Guyot's Intermediate Geography, to Middle Atlantic States.

Colburn's First Lessons, sections 12, 13, 14, and C, sec. 3.

Arithmetic, from United States Money to Percentage.

Greene's Introduction to the Study of English Grammar, to Part II, page 54.

Third Class — Fifth Reader;* systematic teaching of the Introductory Treatise and reading lessons.

Worcester's New Pronouncing Speller; oral and written exercises.

Guyot's Intermediate Geography, from Middle Atlantic States to South America, and review as needed.

Colburn's First Lessons, B and C, sec. 4; A and B, sec. 7; miscellaneous examples in sections 6, 11, and 12, and review sec. 14.

Review Arithmetic, and go to Interest, omitting the Metric System, until the commencement of the next school year.

Greene's Grammar, from Part II, page 54, to Syntax, page 131.

Anderson's Grammar School History, as a reading book, and to be taught "by reading and familiar conversation," to page 53; few dates to be memorized.

FOURTH YEAR.

Second Class — Fifth Reader; teaching of the Introductory Treatise, and reading lessons as in Third Class.

Worcester's New Pronouncing Speller.

Guyot's Intermediate Geography completed, and maps of the New England and Middle Atlantic States reviewed.

Colburn's First Lessons, discretionary with reference to sec. 15; review of the book as required by the Rules.

Arithmetic, from Interest to Ratio.

Greene's Grammar, from page 131 to the end.

Anderson's Grammar School History, from the beginning, to the close of the Revolutionary War, on page 106.

FIFTH YEAR.

First Class — Sixth Reader.

Worcester's New Pronouncing Speller; the whole book.

Gilbert's Graded Test Speller, optional.

*Child's Book of Nature permitted as a reading book to alternate with the Intermediate Reader, in the Sixth, Fifth, Fourth, and Third Classes.

Guyot's Intermediate Geography thoroughly reviewed; the drawings of maps to be *rapid* as well as *accurate*.

Colburn's First Lessons; daily exercises as required by the Rules.

Arithmetic finished and reviewed; omit Custom-house Business, Assessment of Taxes, Currencies, Exchange, Duodecimals, Progression, Alligation, Permutation, and Mensuration of Solids.

Greene's Grammar finished and reviewed.

Anderson's Grammar School History finished and reviewed.

Composition, Writing, Drawing, Music, and Elements of Book-keeping through the whole course.

Declamation by the boys in the First and Second Classes once a month.

Teachers should begin to teach the geography of Massachusetts, county of Middlesex, and city of Lowell, as early in the course as practicable, chiefly in conversational lessons during the first and second years.

"Elementary Lessons in English for Home and School Use," by W. D. Whitney and Mrs. N. L. Knox, used by the teachers for all the classes above the Seventh.

G.

COURSE OF STUDY FOR THE HIGH SCHOOL.

ENGLISH COURSE.

FIRST YEAR. *First Half*—Algebra, Ancient History, English Composition, Drawing. *Second Half*—Algebra, English History, Natural Philosophy, Drawing.

SECOND YEAR. *First Half*—Geometry, Physical Geography, Natural Philosophy. *Second Half*—Geometry, Chemistry, English Grammar.

THIRD YEAR. *First Half*—Arithmetic, Astronomy, Physiology. *Second Half*—Rhetoric, English Literature, Political Science, or Botany.

FOURTH YEAR. *First Half*—Intellectual Philosophy, English Literature, French, German, or Latin. *Second Half*—Botany, Political Science, French, German, or Latin.

Composition, Declamation, Reading, and Music are required throughout the course. Trigonometry, Surveying, Geology, Book-keeping, Analytical Chemistry, Greek, Latin, French, and German are optional studies. An optional study may take the place of any English study.

Each scholar is expected to pursue three regular studies, but is allowed to take a smaller number when health demands it, and to remain as a member of the school, until all the studies of the course are completed. Not more than three regular written examinations are permitted during each half-year.

CLASSICAL COURSE.

FIRST YEAR. *First Half*—Latin Grammar and Reader, English Composition, Algebra, Drawing. *Second Half*—Latin Reader, Cæsar, Greek and Roman History, Algebra, Drawing.

SECOND YEAR. *First Half*—Cæsar, Physics, Chemistry, Geometry. *Second Half*—Cæsar, Ovid, Greek Grammar and Lessons, Latin Composition.

THIRD YEAR. *First Half*—Virgil, Greek Reader, Physical Geography, Arithmetic reviewed, Logarithms, Latin Composition, Greek Composition. *Second Half*—Virgil, Greek Reader, Ancient and Modern Geography, Algebra and Geometry reviewed, Latin Composition, Greek Composition.

FOURTH YEAR. *First Half*—Cicero, Ovid, Homer, Latin Composition, Greek Composition, French or German. *Second Half*—Cicero, Homer, French or German, Latin Composition, Greek Composition, review of course.

In the Classical Course, the same rules obtain as in the English Course, with reference to studies pursued throughout the course, the number of daily recitations, and number of written examinations.

H.

NAMES OF TEACHERS.

| Jan. 1, 1880. SCHOOLS. | TEACHERS. | ELECTED. | SALARIES. | RESIDENCES. |
|-----------------------------------|-----------------------------|----------|-----------|------------------------|
| High,..... | Chas. C. Chase, Principal,. | 1845 | \$1,800 | 11 Nesmith street. |
| | Edwin H. Lord,..... | 1873 | 1,600 | 101 Salem street. |
| | Mary A. Webster,..... | 1860 | 700 | 184 Fletcher street. |
| | Marietta Melvin,..... | 1859 | 600 | 381 Merrimack street. |
| | Elizabeth McDaniels,..... | 1868 | 600 | 162 Stackpole street. |
| | Harriet C. Hovey,..... | 1870 | 600 | 12 Fourth street. |
| | Charlotte E. Draper,..... | 1870 | 600 | 150 Worthen street. |
| | Alice J. Chase,..... | 1877 | 600 | 158 Stackpole street. |
| | M. Jennie Keese,..... | 1878 | 600 | 4 Richardson street. |
| | Rose A. Jordan,..... | 1878 | 600 | 62 Mass. Corporation. |
| <i>Penmanship and Drawing</i> | Bertram Harrison,..... | 1865 | 1,000 | 15 Arlington street. |
| | <i>Vocal Music,...</i> | | | |
| <i>Grammar Sch'l</i> | George F. Willey,..... | 1866 | 1,000 | 32 Appleton street. |
| Bartlett,..... | Samuel Bement, Principal | 1851 | 1,400 | 428 Merrimack street. |
| | Marianne B. Kent,..... | 1859 | 550 | 428 Merrimack street. |
| | Abbie E. French,..... | 1874 | 550 | 40 Marion street. |
| | Mary E. Pike,..... | 1848 | 550 | 53 Third street. |
| | Belle A. Prescott,..... | 1878 | 450 | Mt. Washington st. |
| | M. Ida Howe,..... | 1873 | 550 | 28 Third street. |
| | Edith A. Gove,..... | 1875 | 550 | 74 Baldwin street. |
| | Sophia P. Wetherbee,..... | 1847 | 550 | 23 Kirk street. |
| | Caroline E. Holt,..... | 1856 | 550 | 430 Merrimack street. |
| Collburn,..... | Albert L. Bacheller, Prin. | 1874 | 1,400 | 287 Central street. |
| | Elizabeth W. Frost,..... | 1857 | 550 | Fairmount street. |
| | Sarah J. Crosby,..... | 1868 | 550 | 151 Gorham street. |
| | Susan M. Andrews,..... | 1864 | 550 | 42 Walnut street. |
| | Mary A. Hammill,..... | 1875 | 550 | 19 Carpet corporation. |
| | Kate G. McLaughlin,..... | 1878 | 550 | 62 Suffolk street. |
| | Arvilla L. Reader,..... | 1871 | 550 | 106 Appleton street. |
| Edson,..... | C. W. Burbank, Principal, | 1872 | 1,400 | Cor. School & Bowers. |
| | Mary E. Stone,..... | 1874 | 550 | 13 Cottage street. |
| | Maria C. R. Swan,..... | 1862 | 550 | 35 Adams street. |
| | Anna A. Sargent,..... | 1864 | 550 | 159 Charles street. |
| | Mary F. Carleton,..... | 1856 | 550 | 42 Chapel street. |
| | Fannie A. Scripture,..... | 1873 | 550 | 269 Central street. |
| | Mary A. Balch,..... | 1865 | 550 | 71 Summer street. |
| | Lizzie N. Smith,..... | 1877 | 550 | 74 Lawrence street. |
| | Nettie E. Carleton,..... | 1867 | 550 | 42 Chapel street. |
| | Rosalie T. Burns,..... | 1878 | 450 | 7 E. Merrimack st. |
| | Kate F. Hayes,..... | 1879 | 400 | 13 Floyd street. |
| | Nellie Keefe,..... | 1879 | 400 | 4 Cedar street. |
| | | | | |
| Franklin,..... | Frank F. Coburn, Principal | 1878 | 1,400 | 62 Moore street. |
| | Etta M. Ramsdell,..... | 1878 | 450 | 375 Middlesex street. |
| | Alice M. Clark,..... | 1878 | 450 | 46 Chapel street. |
| | Abbie F. Woodward,..... | 1869 | 550 | 73 Branch street. |
| | Luella A. Wardwell,..... | 1870 | 550 | 30 School street. |
| | Fannie M. Clark,..... | 1874 | 550 | 375 Middlesex street. |
| | Mary F. Burnham,..... | 1879 | 400 | 129 Howard street. |
| Green,..... | Albert L. Fisk, Principal,. | 1874 | 1,400 | 37 Bartlett street. |
| | R. Alice Johnson,..... | 1879 | 400 | 27 Tremont street. |
| | Annie E. Richardson,..... | 1871 | 550 | 190 Moody street. |
| | Lizzie A. Nolan,..... | 1876 | 550 | 333 Merrimack street. |
| | Ruth B. Bailey,..... | 1871 | 550 | 200 Moody street. |
| | Ida Sheldon,..... | 1871 | 550 | 35 Howard street. |
| | Annie C. Howe,..... | 1874 | 550 | 26 Third street. |
| | Emma L. Davenport,..... | 1876 | 550 | 383 Merrimack street. |
| | Mary A. Keyes,..... | 1878 | 450 | 213 Market street. |

NAMES OF TEACHERS—(CONTINUED.)

| January 1, 1880. SCHOOLS. | TEACHERS. | ELECTED. | SALARIES. | RESIDENCES. |
|------------------------------|---------------------------|----------|-----------|------------------------|
| <i>Grammar School.</i> | | | | |
| Mann, | Geo. H. Conley, Prin.. | 1876 | 1,400 | 172 Stackpole street. |
| | Frances M. Webster,.. | 1873 | 550 | 185 Fletcher street. |
| | Laura F. Howe, | 1856 | 550 | 166 Stackpole stree . |
| | Celestia P. Chase, | 1867 | 550 | 61 Tilden street. |
| | Julia M. Healey, | 1870 | 550 | Mt. Vernon street. |
| | Nellie F. Murphy, | 1878 | 450 | 42 North street. |
| Moody, | Joseph Peabody, Prin. | 1856 | 1,400 | 152 Appleton street. |
| | Mary E. Way, | 1858 | 550 | 22 Tyler street. |
| | Helen A. Haggett, | 1865 | 550 | 28 High street. |
| | Mary E. Hardman, | 1873 | 550 | 158 Stackpole street. |
| | Cora V. Barnard, | 1874 | 550 | 43 E. Merrimack street |
| | Laura J. Pindar, | 1856 | 550 | 35 Tyler street. |
| | Sarah E. Bailey, | 1856 | 550 | 88 High street. |
| | Frances E. Hardman, . | 1873 | 550 | 158 Stackpole street. |
| | Frances E. Garrity, | 1874 | 550 | 8 Third street. |
| Varnum, | A. K. Whitecomb, Prin. | 1878 | 1,400 | 178 Bridge street. |
| | Georgiana F. Vinton, . | 1872 ✓ | 550 | 32 Fourth street. |
| | Harriet Bradley, | 1854 | 550 | 38 Fourth street. |
| | Minnie F. Wing, | 1879 | 400 | 36 Hampshire street. |
| | Sarah A. Bradley, | 1857 | 550 | 145 Bridge street. |
| | Clara A. Hannaford, ... | 1869 | 550 | 23 Pawtucket street. |
| | Maria W. Roberts, | 1875 | 550 | 16 Fifth street. |
| <i>Primary No. 1....</i> | Hattie H. Eaton, | 1876 | 550 | 7 Favor street. |
| 2.... | Annie S. Harlow, | 1873 | 550 | 23 Pawtucket street. |
| 3.... | Abbie G. Watson, | 1869 | 550 | 19 Chelmsford street. |
| 4.... | Lucy F. Carleton, | 1855 | 550 | 42 Chapel street. |
| 5.... | Ellen A. Stillings, | 1875 | 550 | 111 Howard street. |
| 6.... | Ella M. Plumado, | 1878 | 450 | 19 Lane street. |
| 7.... | Merrtha S. Williams, ... | 1854 | 550 | 276 Central street. |
| 8.... | Martha A. Franklin, .. | 1866 | 550 | 67 Vernon street. |
| 9.... | Nellie MacDonald, | 1878 | 450 | 84 Prince street. |
| 10.... | Martha A. Neal, | 1847 | 550 | 14 Dodge street. |
| 11.... | Isabella V. McAnulty, .. | 1867 | 550 | 7 Hurd street. |
| 12.... | Minnie C. Smith, | 1877 | 550 | 130 Appleton street. |
| 13.... | Cornelia M. Davis, | 1871 | 550 | 40 Rock street. |
| 14.... | Marietta Hill, | 1870 | 550 | 46 Fairmount street. |
| 15.... | Abbie R. Worthley, ... | 1871 | 550 | 133 Gorham street. |
| 16.... | Nellie Kohawn, | 1877 | 550 | 31 Willow street. |
| 17.... | Sarah C. Fiske, | 1866 | 550 | 134 Appleton street. |
| 18.... | Eliza Cowley, | 1857 | 550 | 178 Lawrence street. |
| 19.... | Alice T. Owens, | 1878 | 450 | 45 Walnut street. |
| 20.... | Mary L. McSorley, | 1879 | 460 | 87 Market street. |
| 21.... | Helen F. Baker, | 1872 | 550 | 34 Adams street. |
| 22.... | Ella E. Gardner, | 1871 | 550 | 4 Mt. Washington st. |
| 23.... | Ellen A. Corbett, | 1878 | 450 | 65 Gorham street. |
| 24.... | Ellen A. Bridge, | 1857 | 550 | 281 Central street. |
| 25.... | Aurelia L. Howe, | 1844 | 550 | 166 Stackpole street. |
| 26.... | Charlotte E. Brown, ... | 1870 | 550 | 158 Fletcher street. |
| 27.... | Mary E. Drew, | 1868 | 550 | 28 Wamesit street. |
| 28.... | Mary E. Corbett, | 1878 | 450 | 65 Gorham street. |
| 29.... | Jennie F. Woodward, . | 1871 | 550 | 73 Branch street. |
| 30.... | Alice L. Frye, | 1873 | 550 | 99 Appleton street. |
| 31.... | Laura E. Lee, | 1873 | 550 | 141 Grand street. |
| 32.... | Ellen F. Coughlan, | 1853 | 550 | 15 Austin street. |
| 33.... | Amanda M. Hadley, ... | 1870 | 550 | 17 Tyler street. |
| 34.... | Lizzie S. Lowe, | 1857 | 550 | 3 Nichols street. |
| 35.... | Clara A. Emerson, | 1869 | 550 | 84 Andover street. |
| 36.... | Mary A. Beard, | 1844 | 550 | 14 Grove street. |
| 37.... | Mercena F. Whitehorn | 1877 | 550 | 79 Conant street. |
| 38.... | Mary O. Kidder, | 1865 | 550 | 143 Moody street. |
| 39.... | Abby L. Sargent, | 1873 | 550 | 110 Stackpole street. |
| 40.... | Sarah E. Scales, ... | 1866 | 550 | 116 Appleton street. |
| 41.... | Lilla J. Greenhalge, ... | 1871 | 550 | 10 Ash street. |
| 42.... | Lizzie M. Hadley, | 1869 | 550 | 177 Moody street. |

NAMES OF TEACHERS — (CONTINUED.)

| January 1, 1880. SCHOOLS. | TEACHERS. | ELECTED. | SALARIES. | RESIDENCES. |
|------------------------------|-------------------------|----------|-----------|------------------------|
| <i>Primary No. 43....</i> | Nellie M. Brown,..... | 1865 | 550 | 158 Fletcher street. |
| 44.... | Mary L. Hill,..... | 1858 | 550 | 126 Worthen street. |
| 45.... | Ellen M. White,..... | 1863 | 550 | Grove street. |
| 46.... | Ella A. Bailey,..... | 1869 | 550 | 164 Bridge street. |
| 47. . | Mary F. Beane,..... | 1879 | 400 | 78 Tenth street. |
| 48.... | Marion A. Scott,..... | 1870 | 550 | 21 Eleventh street. |
| 49.... | Sara R. Swan,..... | 1876 | 550 | 51 Fourth street. |
| 50.... | Marion J. Stevenson,.. | 1878 | 450 | 45 Princeton street. |
| 51 ... | Mary J. Alger,..... | 1868 | 550 | 205 Fairmount street. |
| 52.... | Lucretia A. Day,..... | 1864 | 550 | 274 Central street. |
| 53.... | Charlotte McDaniels,.. | 1878 | 550 | 162 Stackpole street. |
| 54.... | Agnes I. Meldrum,.... | 1876 | 550 | 33 Elm street. |
| 55.... | Stella J. Allen,..... | 1879 | 400 | 1 Myrtle street. |
| 56.... | Elizabeth A. Balch,.. | 1873 | 550 | 1 Fairview street. |
| 57.... | Belle T. Vinal,..... | 1873 | 550 | 226 Thorndike street. |
| 58.... | Ellen M. Holden,..... | 1876 | 550 | Riverside street. |
| 59.... | Alice T. Lee,..... | 1878 | 450 | 113 Lawrence street. |
| 60.... | Jennie C. Boardman,.. | 1877 | 550 | 86 First street. |
| 61.... | Helen M. Brown,..... | 1877 | 550 | 141 Bridge street. |
| 62 ... | Clara B. Horne,..... | 1877 | 550 | 16 So. Highland street |
| 63.... | Emma J. Miller,..... | 1877 | 550 | 96 Fletcher street. |
| 64.... | Delia T. Brady,..... | 1877 | 550 | 375 Central street. |
| 65.... | M. Carrie Stiles,..... | 1878 | 450 | 35 Varney street. |
| 66.... | Helen A. Bowers,..... | 1873 | 550 | 56 Tyler street. |
| 67.... | Clementine H. Bowers, | 1876 | 550 | 18 Loring street. |
| 68.... | Mary McLaughlin,.... | 1879 | 400 | 234 Lawrence street. |
| 69.... | Marietta F. Crowley,.. | 1879 | 400 | 23 Marion street. |
| 70.... | Abbie V. Wheeler, | 1879 | 400 | 183 Moody street. |
| 71.... | Ida T. Hardy,..... | 1879 | 400 | 129 Grand street. |
| 72.... | Anna Kohawn,..... | 1879 | 400 | 31 Willow street. |
| <i>Intermediate No. 1.</i> | Viola A. Hamblett,.... | 1876 | 600 | 60 School street. |
| <i>Mixed No. 1</i> | Elizabeth A. Cotting,.. | 1876 | 550 | 64 Baldwin street. |
| 2 | Laura J. Gould,..... | 1874 | 550 | 4 Varnum avenue. |

Public Schools of the City of Lowell,

FOR THE YEAR ENDING DECEMBER 20, 1879.

| SCHOOL. | LOCATION. | No. of pupils belonging December 19, 1879. | | | Whole No. of pupils on time-book since January 1, 1879. | | | Average No. of pupils belonging to school. | | | Average daily Attendance. | | | Per cent. of attendance. | | | | | | | | | | No. entered not received from any other public school. | Received from other public schools of lower grade. | Received from other public schools of same grade. | Sent to other public schools of higher grade. | No. having legal certificates of schooling for mills. | Under 8 years of age, Dec. 13. | 8 years of age and under 12 years, Dec. 13. | 12 years of age and under 16 years, Dec. 13. | 16 years of age and over, Dec. 13. | |
|-----------------|--------------------------|--|------|----------|---|--------|------|--|--------|--------|---------------------------|----------|--------|--------------------------|-----|----------|--------|--------|-----|----------|--------|--------|------|--|--|---|---|---|--------------------------------|---|--|------------------------------------|--------|
| | | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. | Males. | | Females. | Total. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| High..... | Anne and Kirk streets .. | 162 | 206 | 368 | 246 | 271 | 517 | 153 | 194 | 347 | 146 | 189 | 335 | 96 | 5 | 147 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 216 | | | | | | | |
| <i>Grammar.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bartlett..... | Clark street | 227 | 165 | 392 | 341 | 237 | 578 | 228 | 164 | 392 | 213 | 151 | 364 | 93 | 31 | 86 | 11 | 27 | 31 | 36 | 9 | 208 | 183 | | | | | | | | | | |
| Colburn | Lawrence street | 173 | 111 | 284 | 255 | 169 | 424 | 159 | 109 | 268 | 143 | 99 | 242 | 90 | 23 | 92 | 15 | 10 | 14 | 80 | 0 | 155 | 124 | | | | | | | | | | |
| Edson | Highland street | 289 | 248 | 537 | 379 | 323 | 702 | 234 | 207 | 441 | 227 | 191 | 418 | 94 | 32 | 178 | 29 | 16 | 28 | 42 | 1 | 190 | 239 | | | | | | | | | | |
| Franklin | Branch street | 155 | 139 | 294 | 222 | 173 | 395 | 166 | 132 | 298 | 151 | 121 | 272 | 91 | 15 | 74 | 18 | 16 | 22 | 13 | 3 | 137 | 151 | | | | | | | | | | |
| Green | Merrimack street..... | 189 | 155 | 344 | 301 | 228 | 529 | 182 | 138 | 320 | 171 | 127 | 298 | 93 | 41 | 102 | 20 | 14 | 20 | 41 | 2 | 182 | 147 | | | | | | | | | | |
| Mann | Lewis street | 181 | 50 | 231 | 302 | 71 | 373 | 164 | 44 | 208 | 151 | 39 | 190 | 91 | 17 | 83 | 12 | 7 | 103 | 37 | 3 | 139 | 102 | | | | | | | | | | |
| Moody | High and E. Merrimack. | 178 | 176 | 354 | 279 | 258 | 537 | 173 | 175 | 348 | 163 | 160 | 323 | 93 | 32 | 95 | 14 | 20 | 25 | 37 | 3 | 205 | 152 | | | | | | | | | | |
| Varnum..... | Myrtle street..... | 151 | 160 | 311 | 224 | 204 | 428 | 153 | 143 | 296 | 136 | 128 | 264 | 90 | 17 | 69 | 17 | 10 | 26 | 42 | 9 | 156 | 154 | | | | | | | | | | |
| Totals..... | | 1543 | 1204 | 2747 | 2303 | 1663 | 3966 | 1459 | 1112 | 2571 | 1355 | 1016 | 2371 | 92 | 208 | 779 | 136 | 120 | 173 | 394 | 25 | 1372 | 1272 | 41 | | | | | | | | | |

Primaries.

| No. | 17 | 40 | 43 | 33 | 76 | 20 | 16 | 36 | 19 | 14 | 33 | 92 | 10 | 19 | 7 | 1 | 21 | 5 | 5 | 31 | 2 | 0 |
|---------------------------|-----|------|------|-----|------|-----|-----|------|-----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|-----|----|---|
| Kirk street | 23 | 40 | 43 | 33 | 76 | 20 | 16 | 36 | 19 | 14 | 33 | 92 | 10 | 19 | 7 | 1 | 21 | 5 | 5 | 31 | 2 | 0 |
| School street | 30 | 54 | 40 | 45 | 85 | 24 | 25 | 49 | 23 | 23 | 23 | 46 | 6 | 24 | 7 | 0 | 25 | 0 | 20 | 24 | 1 | 0 |
| Chapel street | 21 | 43 | 31 | 35 | 66 | 19 | 22 | 42 | 18 | 21 | 39 | 93 | 4 | 15 | 1 | 6 | 14 | 6 | 16 | 34 | 4 | 0 |
| Worthen street | 26 | 47 | 46 | 37 | 71 | 24 | 23 | 46 | 23 | 13 | 34 | 92 | 7 | 22 | 1 | 1 | 23 | 4 | 13 | 22 | 1 | 0 |
| Church street | 18 | 25 | 43 | 39 | 82 | 18 | 25 | 43 | 17 | 21 | 38 | 88 | 7 | 22 | 1 | 1 | 23 | 5 | 13 | 36 | 2 | 0 |
| Worthen street | 24 | 6 | 30 | 45 | 62 | 24 | 9 | 33 | 23 | 8 | 31 | 94 | 0 | 17 | 6 | 2 | 23 | 1 | 2 | 36 | 6 | 0 |
| Elliott street | 15 | 46 | 58 | 34 | 92 | 27 | 19 | 46 | 25 | 17 | 42 | 90 | 9 | 18 | 12 | 11 | 23 | 7 | 19 | 31 | 0 | 0 |
| Central street | 17 | 21 | 38 | 32 | 71 | 21 | 21 | 42 | 20 | 19 | 39 | 93 | 3 | 14 | 6 | 7 | 22 | 2 | 5 | 32 | 1 | 0 |
| Charles street | 21 | 38 | 34 | 32 | 67 | 21 | 34 | 58 | 22 | 21 | 43 | 89 | 3 | 17 | 9 | 11 | 20 | 2 | 18 | 24 | 1 | 0 |
| Howard street | 19 | 44 | 35 | 32 | 67 | 24 | 25 | 51 | 23 | 22 | 45 | 88 | 10 | 20 | 14 | 1 | 29 | 0 | 17 | 44 | 0 | 0 |
| High street | 35 | 26 | 61 | 42 | 89 | 25 | 25 | 50 | 24 | 22 | 46 | 91 | 6 | 18 | 11 | 2 | 27 | 2 | 19 | 33 | 0 | 0 |
| Elliott street | 26 | 29 | 55 | 47 | 89 | 33 | 15 | 48 | 30 | 14 | 41 | 92 | 5 | 33 | 1 | 15 | 17 | 8 | 7 | 36 | 1 | 0 |
| Lawrence street | 30 | 44 | 47 | 47 | 94 | 24 | 24 | 48 | 20 | 22 | 42 | 90 | 7 | 25 | 13 | 10 | 26 | 5 | 9 | 39 | 2 | 0 |
| Fayette street | 22 | 28 | 50 | 59 | 114 | 23 | 33 | 56 | 22 | 30 | 52 | 93 | 11 | 21 | 5 | 3 | 33 | 17 | 10 | 43 | 4 | 0 |
| Rock street | 24 | 33 | 40 | 38 | 84 | 23 | 20 | 43 | 22 | 17 | 39 | 90 | 9 | 31 | 8 | 6 | 28 | 0 | 10 | 46 | 0 | 0 |
| Myrtle street | 31 | 25 | 50 | 50 | 100 | 29 | 25 | 54 | 27 | 22 | 49 | 91 | 5 | 31 | 8 | 6 | 28 | 0 | 10 | 46 | 0 | 0 |
| West Sixth street | 17 | 44 | 31 | 47 | 78 | 17 | 26 | 43 | 16 | 23 | 39 | 90 | 0 | 13 | 14 | 5 | 18 | 10 | 7 | 33 | 4 | 0 |
| High street | 31 | 27 | 53 | 48 | 101 | 31 | 25 | 56 | 29 | 23 | 52 | 93 | 4 | 33 | 7 | 7 | 27 | 2 | 26 | 31 | 1 | 0 |
| Lawrence street | 52 | 44 | 47 | 47 | 88 | 23 | 22 | 45 | 22 | 21 | 83 | 96 | 8 | 27 | 8 | 4 | 13 | 3 | 10 | 29 | 1 | 0 |
| West Sixth street | 22 | 50 | 41 | 42 | 91 | 28 | 20 | 48 | 25 | 20 | 45 | 94 | 7 | 17 | 6 | 5 | 15 | 8 | 8 | 38 | 4 | 0 |
| Dover street | 29 | 49 | 49 | 42 | 91 | 18 | 20 | 38 | 17 | 17 | 34 | 89 | 4 | 31 | 3 | 4 | 28 | 0 | 17 | 27 | 0 | 0 |
| Cor. Central and Lyon st. | 23 | 44 | 37 | 41 | 78 | 18 | 30 | 38 | 17 | 17 | 34 | 89 | 4 | 31 | 3 | 4 | 28 | 0 | 17 | 27 | 0 | 0 |
| Cor. Central and Lyon st. | 19 | 30 | 49 | 52 | 95 | 23 | 30 | 53 | 21 | 27 | 48 | 90 | 5 | 22 | 5 | 7 | 27 | 6 | 15 | 36 | 2 | 0 |
| Totals | 567 | 1077 | 1031 | 922 | 1953 | 547 | 518 | 1065 | 509 | 457 | 966 | 91 | 124 | 504 | 176 | 134 | 541 | 97 | 283 | 743 | 39 | 0 |

Primaries.

| No. | 31 | 52 | 59 | 48 | 107 | 30 | 21 | 51 | 27 | 19 | 46 | 90 | 25 | 0 | 9 | 10 | 20 | 0 | 47 | 5 | 0 | 0 |
|---------------------------|-----|------|------|------|------|-----|-----|------|-----|-----|------|----|-----|---|-----|-----|-----|----|------|-----|----|---|
| Paige street | 31 | 52 | 59 | 48 | 107 | 30 | 21 | 51 | 27 | 19 | 46 | 90 | 25 | 0 | 9 | 10 | 20 | 0 | 47 | 5 | 0 | 0 |
| School street | 29 | 54 | 46 | 45 | 91 | 25 | 22 | 47 | 22 | 20 | 42 | 90 | 39 | 0 | 9 | 7 | 24 | 0 | 47 | 5 | 0 | 0 |
| Chapel street | 28 | 48 | 50 | 38 | 88 | 23 | 18 | 41 | 21 | 16 | 37 | 91 | 29 | 0 | 10 | 14 | 15 | 0 | 40 | 9 | 0 | 0 |
| Worthen street | 20 | 40 | 42 | 44 | 86 | 22 | 21 | 43 | 20 | 19 | 39 | 86 | 56 | 0 | 8 | 8 | 18 | 0 | 38 | 2 | 0 | 0 |
| Church street | 50 | 25 | 75 | 51 | 156 | 46 | 24 | 70 | 41 | 19 | 60 | 86 | 56 | 0 | 21 | 21 | 19 | 3 | 50 | 18 | 6 | 0 |
| Worthen street | 29 | 26 | 55 | 43 | 99 | 24 | 23 | 47 | 21 | 20 | 41 | 87 | 40 | 0 | 13 | 19 | 19 | 0 | 48 | 5 | 0 | 0 |
| Elliott street | 55 | 27 | 82 | 43 | 139 | 49 | 21 | 70 | 44 | 17 | 61 | 87 | 57 | 0 | 12 | 5 | 18 | 8 | 23 | 21 | 1 | 0 |
| Central street | 34 | 23 | 57 | 48 | 120 | 37 | 21 | 58 | 35 | 19 | 54 | 93 | 23 | 0 | 10 | 1 | 19 | 2 | 37 | 11 | 0 | 0 |
| Charles street | 32 | 16 | 48 | 40 | 88 | 28 | 21 | 49 | 25 | 18 | 43 | 88 | 23 | 0 | 5 | 8 | 16 | 1 | 37 | 11 | 0 | 0 |
| Howard street | 37 | 33 | 70 | 69 | 144 | 34 | 24 | 58 | 31 | 23 | 64 | 93 | 65 | 0 | 11 | 17 | 17 | 1 | 65 | 6 | 0 | 0 |
| High street | 29 | 62 | 64 | 52 | 116 | 36 | 24 | 60 | 31 | 20 | 51 | 87 | 46 | 0 | 20 | 12 | 20 | 2 | 54 | 8 | 0 | 0 |
| Elliott street | 31 | 56 | 49 | 43 | 92 | 27 | 24 | 51 | 24 | 22 | 46 | 90 | 54 | 0 | 7 | 8 | 18 | 0 | 54 | 2 | 0 | 0 |
| Ames street | 20 | 26 | 55 | 63 | 123 | 31 | 23 | 54 | 29 | 21 | 50 | 93 | 54 | 0 | 14 | 10 | 35 | 1 | 43 | 8 | 0 | 0 |
| Fayette street | 21 | 17 | 38 | 49 | 95 | 26 | 23 | 49 | 24 | 21 | 45 | 92 | 33 | 0 | 8 | 17 | 24 | 4 | 32 | 5 | 1 | 0 |
| Rock street | 16 | 37 | 90 | 98 | 187 | 50 | 41 | 91 | 47 | 36 | 83 | 91 | 69 | 0 | 29 | 28 | 36 | 4 | 77 | 10 | 5 | 0 |
| Myrtle street | 53 | 35 | 51 | 40 | 91 | 24 | 18 | 42 | 29 | 15 | 35 | 83 | 48 | 0 | 5 | 16 | 20 | 2 | 28 | 8 | 1 | 0 |
| West Sixth street | 35 | 59 | 53 | 44 | 97 | 28 | 25 | 53 | 24 | 21 | 45 | 85 | 39 | 0 | 12 | 3 | 30 | 0 | 49 | 10 | 0 | 0 |
| High street | 32 | 25 | 57 | 52 | 96 | 29 | 29 | 51 | 26 | 17 | 47 | 82 | 26 | 0 | 22 | 17 | 15 | 1 | 42 | 12 | 1 | 0 |
| Ames street | 25 | 30 | 55 | 53 | 113 | 22 | 22 | 47 | 21 | 26 | 44 | 97 | 45 | 0 | 15 | 13 | 32 | 0 | 46 | 10 | 0 | 0 |
| West Sixth street | 19 | 21 | 40 | 42 | 58 | 100 | 22 | 47 | 21 | 23 | 44 | 94 | 28 | 0 | 11 | 15 | 27 | 0 | 41 | 1 | 0 | 0 |
| Dover street | 39 | 28 | 67 | 56 | 123 | 32 | 24 | 56 | 29 | 21 | 50 | 89 | 45 | 0 | 28 | 11 | 18 | 1 | 47 | 29 | 3 | 0 |
| Cor. Central and Lyon st. | 30 | 19 | 49 | 43 | 97 | 28 | 22 | 50 | 25 | 19 | 44 | 88 | 30 | 0 | 10 | 4 | 28 | 0 | 43 | 3 | 0 | 0 |
| Cor. Central and Lyon st. | 50 | 41 | 91 | 80 | 171 | 45 | 43 | 88 | 39 | 36 | 75 | 85 | 45 | 0 | 23 | 11 | 26 | 0 | 75 | 15 | 1 | 0 |
| Totals | 758 | 1335 | 1416 | 1203 | 2619 | 718 | 559 | 1277 | 647 | 489 | 1136 | 89 | 942 | 0 | 312 | 275 | 516 | 26 | 1092 | 226 | 24 | 0 |

Lower Grade.

Upper Grade.

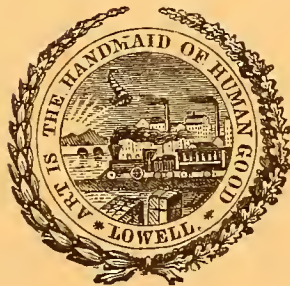
Summary of the Annual Returns of the Public Schools—Continued.

| SCHOOL. | LOCATION. | No. of pupils belonging December 19, 1879. | | | | Whole No. of pupils on time-book since January 1, 1879. | | | | Average No. of pupils belonging to school. | | | Average daily Attendance. | | | Per cent. of attendance. | No. entered not received from any other public school. | Received from other public schools of lower grade. | Received from other public schools of same grade. | Sent to other public schools of same grade. | Sent to other public schools of higher grade. | No. having legal certificates of schooling for mills. | Under 8 years of age, Dec. 13. | 8 years of age and under 12 years, Dec. 13. | 12 years of age and under 16 years, Dec. 13. | 16 years of age and over, Dec. 13. | |
|-----------|--|--|----------|----------|--------|---|--------|--------|----------|--|--------|----------|---------------------------|----------|----------|--------------------------|--|--|---|---|---|---|--------------------------------|---|--|------------------------------------|--------|
| | | Males. | | Females. | | Total. | Males. | | Females. | | Total. | Males. | | Females. | | | | | | | | | | | | | Total. |
| | | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | | | | | | | | | | | | Total. |
| Ungraded. | Primaries. { No. 31..... 32..... 33..... 34..... 35..... 36..... 37..... 38..... 39..... 40..... 41..... 42..... 43..... 44..... 45..... 46..... 47..... 48..... 49..... 50..... 51..... 52..... 53..... 54..... 55..... 56..... 57..... 58..... 59..... 60..... 61..... 62..... 63..... 64..... 65..... 66..... 67..... 68..... 69..... 70..... 71..... 72..... 73..... 74..... 75..... 76..... 77..... 78..... 79..... 80..... 81..... 82..... 83..... 84..... 85..... 86..... 87..... 88..... 89..... 90..... 91..... 92..... 93..... 94..... 95..... 96..... 97..... 98..... 99..... 100..... 101..... 102..... 103..... 104..... 105..... 106..... 107..... 108..... 109..... 110..... 111..... 112..... 113..... 114..... 115..... 116..... 117..... 118..... 119..... 120..... 121..... 122..... 123..... 124..... 125..... 126..... 127..... 128..... 129..... 130..... 131..... 132..... 133..... 134..... 135..... 136..... 137..... 138..... 139..... 140..... 141..... 142..... 143..... 144..... 145..... 146..... 147..... 148..... 149..... 150..... 151..... 152..... 153..... 154..... 155..... 156..... 157..... 158..... 159..... 160..... 161..... 162..... 163..... 164..... 165..... 166..... 167..... 168..... 169..... 170..... 171..... 172..... 173..... 174..... 175..... 176..... 177..... 178..... 179..... 180..... 181..... 182..... 183..... 184..... 185..... 186..... 187..... 188..... 189..... 190..... 191..... 192..... 193..... 194..... 195..... 196..... 197..... 198..... 199..... 200..... 201..... 202..... 203..... 204..... 205..... 206..... 207..... 208..... 209..... 210..... 211..... 212..... 213..... 214..... 215..... 216..... 217..... 218..... 219..... 220..... 221..... 222..... 223..... 224..... 225..... 226..... 227..... 228..... 229..... 230..... 231..... 232..... 233..... 234..... 235..... 236..... 237..... 238..... 239..... 240..... 241..... 242..... 243..... 244..... 245..... 246..... 247..... 248..... 249..... 250..... 251..... 252..... 253..... 254..... 255..... 256..... 257..... 258..... 259..... 260..... 261..... 262..... 263..... 264..... 265..... 266..... 267..... 268..... 269..... 270..... 271..... 272..... 273..... 274..... 275..... 276..... 277..... 278..... 279..... 280..... 281..... 282..... 283..... 284..... 285..... 286..... 287..... 288..... 289..... 290..... 291..... 292..... 293..... 294..... 295..... 296..... 297..... 298..... 299..... 300..... 301..... 302..... 303..... 304..... 305..... 306..... 307..... 308..... 309..... 310..... 311..... 312..... 313..... 314..... 315..... 316..... 317..... 318..... 319..... 320..... 321..... 322..... 323..... 324..... 325..... 326..... 327..... 328..... 329..... 330..... 331..... 332..... 333..... 334..... 335..... 336..... 337..... 338..... 339..... 340..... 341..... 342..... 343..... 344..... 345..... 346..... 347..... 348..... 349..... 350..... 351..... 352..... 353..... 354..... 355..... 356..... 357..... 358..... 359..... 360..... 361..... 362..... 363..... 364..... 365..... 366..... 367..... 368..... 369..... 370..... 371..... 372..... 373..... 374..... 375..... 376..... 377..... 378..... 379..... 380..... 381..... 382..... 383..... 384..... 385..... 386..... 387..... 388..... 389..... 390..... 391..... 392..... 393..... 394..... 395..... 396..... 397..... 398..... 399..... 400..... 401..... 402..... 403..... 404..... 405..... 406..... 407..... 408..... 409..... 410..... 411..... 412..... 413..... 414..... 415..... 416..... 417..... 418..... 419..... 420..... 421..... 422..... 423..... 424..... 425..... 426..... 427..... 428..... 429..... 430..... 431..... 432..... 433..... 434..... 435..... 436..... 437..... 438..... 439..... 440..... 441..... 442..... 443..... 444..... 445..... 446..... 447..... 448..... 449..... 450..... 451..... 452..... 453..... 454..... 455..... 456..... 457..... 458..... 459..... 460..... 461..... 462..... 463..... 464..... 465..... 466..... 467..... 468..... 469..... 470..... 471..... 472..... 473..... 474..... 475..... 476..... 477..... 478..... 479..... 480..... 481..... 482..... 483..... 484..... 485..... 486..... 487..... 488..... 489..... 490..... 491..... 492..... 493..... 494..... 495..... 496..... 497..... 498..... 499..... 500..... 501..... 502..... 503..... 504..... 505..... 506..... 507..... 508..... 509..... 510..... 511..... 512..... 513..... 514..... 515..... 516..... 517..... 518..... 519..... 520..... 521..... 522..... 523..... 524..... 525..... 526..... 527..... 528..... 529..... 530..... 531..... 532..... 533..... 534..... 535..... 536..... 537..... 538..... 539..... 540..... 541..... 542..... 543..... 544..... 545..... 546..... 547..... 548..... 549..... 550..... 551..... 552..... 553..... 554..... 555..... 556..... 557..... 558..... 559..... 560..... 561..... 562..... 563..... 564..... 565..... 566..... 567..... 568..... 569..... 570..... 571..... 572..... 573..... 574..... 575..... 576..... 577..... 578..... 579..... 580..... 581..... 582..... 583..... 584..... 585..... 586..... 587..... 588..... 589..... 590..... 591..... 592..... 593..... 594..... 595..... 596..... 597..... 598..... 599..... 600..... 601..... 602..... 603..... 604..... 605..... 606..... 607..... 608..... 609..... 610..... 611..... 612..... 613..... 614..... 615..... 616..... 617..... 618..... 619..... 620..... 621..... 622..... 623..... 624..... 625..... 626..... 627..... 628..... 629..... 630..... 631..... 632..... 633..... 634..... 635..... 636..... 637..... 638..... 639..... 640..... 641..... 642..... 643..... 644..... 645..... 646..... 647..... 648..... 649..... 650..... 651..... 652..... 653..... 654..... 655..... 656..... 657..... 658..... 659..... 660..... 661..... 662..... 663..... 664..... 665..... 666..... 667..... 668..... 669..... 670..... 671..... 672..... 673..... 674..... 675..... 676..... 677..... 678..... 679..... 680..... 681..... 682..... 683..... 684..... 685..... 686..... 687..... 688..... 689..... 690..... 691..... 692..... 693..... 694..... 695..... 696..... 697..... 698..... 699..... 700..... 701..... 702..... 703..... 704..... 705..... 706..... 707..... 708..... 709..... 710..... 711..... 712..... 713..... 714..... 715..... 716..... 717..... 718..... 719..... 720..... 721..... 722..... 723..... 724..... 725..... 726..... 727..... 728..... 729..... 730..... 731..... 732..... 733..... 734..... 735..... 736..... 737..... 738..... 739..... 740..... 741..... 742..... 743..... 744..... 745..... 746..... 747..... 748..... 749..... 750..... 751..... 752..... 753..... 754..... 755..... 756..... 757..... 758..... 759..... 760..... 761..... 762..... 763..... 764..... 765..... 766..... 767..... 768..... 769..... 770..... 771..... 772..... 773..... 774..... 775..... 776..... 777..... 778..... 779..... 780..... 781..... 782..... 783..... 784..... 785..... 786..... 787..... 788..... 789..... 790..... 791..... 792..... 793..... 794..... 795..... 796..... 797..... 798..... 799..... 800..... 801..... 802..... 803..... 804..... 805..... 806..... 807..... 808..... 809..... 810..... 811..... 812..... 813..... 814..... 815..... 816..... 817..... 818..... 819..... 820..... 821..... 822..... 823..... 824..... 825..... 826..... 827..... 828..... 829..... 830..... 831..... 832..... 833..... 834..... 835..... 836..... 837..... 838..... 839..... 840..... 841..... 842..... 843..... 844..... 845..... 846..... 847..... 848..... 849..... 850..... 851..... 852..... 853..... 854..... 855..... 856..... 857..... 858..... 859..... 860..... 861..... 862..... 863..... 864..... 865..... 866..... 867..... 868..... 869..... 870..... 871..... 872..... 873..... 874..... 875..... 876..... 877..... 878..... 879..... 880..... 881..... 882..... 883..... 884..... 885..... 886..... 887..... 888..... 889..... 890..... 891..... 892..... 893..... 894..... 895..... 896..... 897..... 898..... 899..... 900..... 901..... 902..... 903..... 904..... 905..... 906..... 907..... 908..... 909..... 910..... 911..... 912..... 913..... 914..... 915..... 916..... 917..... 918..... 919..... 920..... 921..... 922..... 923..... 924..... 925..... 926..... 927..... 928..... 929..... 930..... 931..... 932..... 933..... 934..... 935..... 936..... 937..... 938..... 939..... 940..... 941..... 942..... 943..... 944..... 945..... 946..... 947..... 948..... 949..... 950..... 951..... 952..... 953..... 954..... 955..... 956..... 957..... 958..... 959..... 960..... 961..... 962..... 963..... 964..... 965..... 966..... 967..... 968..... 969..... 970..... 971..... 972..... 973..... 974..... 975..... 976..... 977..... 978..... 979..... 980..... 981..... 982..... 983..... 984..... 985..... 986..... 987..... 988..... 989..... 990..... 991..... 992..... 993..... 994..... 995..... 996..... 997..... 998..... 999..... 1000..... 1001..... 1002..... 1003..... 1004..... 1005..... 1006..... 1007..... 1008..... 1009..... 1010..... 1011..... 1012..... 1013..... 1014..... 1015..... 1016..... 1017..... 1018..... 1019..... 1020..... 1021..... 1022..... 1023..... 1024..... 1025..... 1026..... 1027..... 1028..... 1029..... 1030..... 1031..... 1032..... 1033..... 1034..... 1035..... 1036..... 1037..... 1038..... 1039..... 1040..... 1041..... 1042..... 1043..... 1044..... 1045..... 1046..... 1047..... 1048..... 1049..... 1050..... 1051..... 1052..... 1053..... 1054..... 1055..... 1056..... 1057..... 1058..... 1059..... 1060..... 1061..... 1062..... 1063..... 1064..... 1065..... 1066..... 1067..... 1068..... 1069..... 1070..... 1071..... 1072..... 1073..... 1074..... 1075..... 1076..... 1077..... 1078..... 1079..... 1080..... 1081..... 1082..... 1083..... 1084..... 1085..... 1086..... 1087..... 1088..... 1089..... 1090..... 1091..... 1092..... 1093..... 1094..... 1095..... 1096..... 1097..... 1098..... 1099..... 1100..... 1101..... 1102..... 1103..... 1104..... 1105..... 1106..... 1107..... 1108..... 1109..... 1110..... 1111..... 1112..... 1113..... 1114..... 1115..... 1116..... 1117..... 1118..... 1119..... 1120..... 1121..... 1122..... 1123..... 1124..... 1125..... 1126..... 1127..... 1128..... 1129..... 1130..... 1131..... 1132..... 1133..... 1134..... 1135..... 1136..... 1137..... 1138..... 1139..... 1140..... 1141..... 1142..... 1143..... 1144..... 1145..... 1146..... 1147..... 1148..... 1149..... 1150..... 1151..... 1152..... 1153..... 1154..... 1155..... 1156..... 1157..... 1158..... 1159..... 1160..... 1161..... 1162..... 1163..... 1164..... 1165..... 1166..... 1167..... 1168..... 1169..... 1170..... 1171..... 1172..... 1173..... 1174..... 1175..... 1176..... 1177..... 1178..... 1179..... 1180..... 1181..... 1182..... 1183..... 1184..... 1185..... 1186..... 1187..... 1188..... 1189..... 1190..... 1191..... 1192..... 1193..... 1194..... 1195..... 1196..... 1197..... 1198..... 1199..... 1200..... 1201..... 1202..... 1203..... 1204..... 1205..... 1206..... 1207..... 1208..... 1209..... 1210..... 1211..... 1212..... 1213..... 1214..... 1215..... 1216..... 1217..... 1218..... 1219..... 1220..... 1221..... 1222..... 1223..... 1224..... 1225..... 1226..... 1227..... 1228..... 1229..... 1230..... 1231..... 1232..... 1233..... 1234..... 1235..... 1236..... 1237..... 1238..... 1239..... 1240..... 1241..... 1242..... 1243..... 1244..... 1245..... 1246..... 1247..... 1248..... 1249..... 1250..... 1251..... 1252..... 1253..... 1254..... 1255..... 1256..... 1257..... 1258..... 1259..... 1260..... 1261..... 1262..... 1263..... 1264..... 1265..... 1266..... 1267..... 1268..... 1269..... 1270..... 1271..... 1272..... 1273..... 1274..... 1275..... 1276..... 1277..... 1278..... 1279..... 1280..... 1281..... 1282..... 1283..... 1284..... 1285..... 1286..... 1287..... 1288..... 1289..... 1290..... 1291..... 1292..... 1293..... 1294..... 1295..... 1296..... 1297..... 1298..... 1299..... 1300..... 1301..... 1302..... 1303..... 1304..... 1305..... 1306..... 1307..... 1308..... 1309..... 1310..... 1311..... 1312..... 1313..... 1314..... 1315..... 1316..... 1317..... 1318..... 1319..... 1320..... 1321..... 1322..... 1323..... 1324..... 1325..... 1326..... 1327..... 1328..... 1329..... 1330..... 1331..... 1332..... 1333..... 1334..... 1335..... 1336..... 1337..... 1338..... 1339..... 1340..... 1341..... 1342..... 1343..... 1344..... 1345..... 1346..... 1347..... 1348..... 1349..... 1350..... 1351..... 1352..... 1353..... 1354..... 1355..... 1356..... 1357..... 1358..... 1359..... 1360..... 1361..... 1362..... 1363..... 1364..... 1365..... 1366..... 1367..... 1368..... 1369..... 1370..... 1371..... 1372..... 1373..... 1374..... 1375..... 1376..... 1377..... 1378..... 1379..... 1380..... 1381..... 1382..... 1383..... 1384..... 1385..... 1386..... 1387..... 1388..... 1389..... 1390..... 1391..... 1392..... 1393..... 1394..... 1395..... 1396..... 1397..... 1398..... 1399..... 1400..... 1401..... 1402..... 1403..... 1404..... 1405..... 1406..... 1407..... 1408..... 1409..... 1410..... 1411..... 1412..... 1413..... 1414..... 1415..... 1416..... 1417..... 1418..... 1419..... 1420..... 1421..... 1422..... 1423..... 1424..... 1425..... 1426..... 1427..... 1428..... 1429..... 1430..... 1431..... 1432..... 1433..... 1434..... 1435..... 1436..... 1437..... 1438..... 1439..... 1440..... 1441..... 1442..... 1443..... 1444..... 1445..... 1446..... 1447..... 1448..... 1449..... 1450..... 1451..... 1452..... 1453..... 1454..... 1455..... 1456..... 1457..... 1458..... 1459..... 1460..... 1461..... 1462..... 1463..... 1464..... 1465..... 1466..... 1467..... 1468..... 1469..... 1470..... 1471..... 1472..... 1473..... 1474..... 1475..... 1476..... 1477..... 1478..... 1479..... 1480..... 1481..... 1482..... 1483..... 1484..... 1485..... 1486..... 1487..... 1488..... 1489..... 1490..... 1491..... 1492..... 1493..... 1494..... 1495..... 1496..... 1497..... 1498..... 1499..... 1500..... 1501..... 1502..... 1503..... 1504..... 1505..... 1506..... 1507..... 1508..... 1509..... 1510..... 1511..... 1512..... 1513..... 1514..... 1515..... 1516..... 1517..... 1518..... 1519..... 1520..... 1521..... 1522..... 1523..... 1524..... 1525..... 1526..... 1527..... 1528..... 1529..... 1530..... 1531..... 1532..... 1533..... 1534..... 1535..... 1536..... 1537..... 1538..... 1539..... 1540..... 1541..... 1542..... 1543..... 1544..... 1545..... 1546..... 1547..... 1548..... 1549..... 1550..... 1551..... 1552..... 1553..... 1554..... 1555..... 1556..... 1557..... 1558..... 1559..... 1560..... 1561..... 1562..... 1563..... 1564..... 1565..... 1566..... 1567..... 1568..... 1569..... 1570..... 1571..... 1572..... 1573..... 1574..... 1575..... 1576..... 1577..... 1578..... 1579..... 1580..... 1581..... 1582..... 1583..... 1584..... 1585..... 1586..... 1587..... 1588..... 1589..... 1590..... 1591..... 1592..... 1593..... 1594..... 1595..... 1596..... 1597..... 1598..... 1599..... 1600..... 1601..... 1602..... 1603..... 1604..... 1605..... 1606..... 1607..... 1608..... 1609..... 1610..... 1611..... 1612..... 1613..... 1614..... 1615..... 1616..... 1617..... 1618..... 1619..... 1620..... 1621..... 1622..... 1623..... 1624..... 1625..... 1626..... 1627..... 1628..... 1629..... 1630..... 1631..... 1632..... 1633..... 1634..... 1635..... 1636..... 1637..... 1638..... 1639..... 1640..... 1641..... 1642..... 1643..... 1644..... 1645..... 16 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|----|-----|----|-----|----|-----|---|
| Primaries: Middle Grade. | No. 34..... | 28 | 16 | 44 | 57 | 47 | 104 | 25 | 20 | 45 | 23 | 17 | 40 | 93 | 7 | 30 | 5 | 12 | 33 | 3 | 14 | 25 | 1 | 0 |
| | 57..... | 16 | 17 | 33 | 35 | 36 | 71 | 16 | 16 | 32 | 16 | 14 | 30 | 93 | 4 | 28 | 4 | 12 | 26 | 1 | 17 | 14 | 2 | 0 |
| | 38..... | 36 | 18 | 53 | 84 | 56 | 140 | 27 | 20 | 47 | 26 | 18 | 44 | 94 | 14 | 75 | 5 | 4 | 60 | 13 | 19 | 30 | 6 | 0 |
| | 11..... | 40 | 11 | 51 | 77 | 26 | 103 | 34 | 10 | 44 | 31 | 8 | 39 | 89 | 8 | 37 | 15 | 7 | 36 | 4 | 37 | 15 | 0 | 0 |
| | 22..... | 32 | 14 | 46 | 80 | 41 | 121 | 38 | 16 | 51 | 33 | 14 | 47 | 87 | 6 | 54 | 5 | 7 | 49 | 0 | 34 | 15 | 0 | 0 |
| | Totals..... | 151 | 76 | 227 | 333 | 206 | 539 | 140 | 82 | 222 | 129 | 71 | 200 | 90 | 39 | 224 | 34 | 42 | 204 | 21 | 121 | 99 | 9 | 0 |
| Primaries: Lower Grade. | No. 50..... | 57 | 33 | 90 | 96 | 63 | 159 | 46 | 26 | 72 | 42 | 22 | 64 | 89 | 74 | 0 | 26 | 14 | 30 | 0 | 78 | 11 | 1 | 0 |
| | 13..... | 12 | 16 | 28 | 35 | 40 | 75 | 16 | 19 | 35 | 15 | 18 | 33 | 94 | 34 | 0 | 1 | 13 | 30 | 0 | 25 | 3 | 0 | 0 |
| | { 10..... | 17 | 42 | 56 | 147 | 93 | 240 | 53 | 33 | 86 | 49 | 27 | 76 | 90 | 167 | 0 | 3 | 26 | 43 | 9 | 86 | 33 | 8 | 0 |
| | { 63..... | 35 | 21 | 103 | 89 | 75 | 164 | 39 | 20 | 68 | 35 | 24 | 59 | 87 | 146 | 0 | 18 | 15 | 32 | 12 | 30 | 20 | 9 | 0 |
| | 26..... | 57 | 12 | 69 | 115 | 34 | 149 | 47 | 14 | 61 | 44 | 13 | 57 | 93 | 71 | 0 | 19 | 12 | 43 | 0 | 41 | 8 | 1 | 0 |
| | 41..... | 41 | 13 | 54 | 91 | 44 | 135 | 41 | 17 | 58 | 37 | 14 | 51 | 88 | 57 | 0 | 10 | 16 | 57 | 0 | 51 | 3 | 0 | 0 |
| Totals..... | | 273 | 137 | 410 | 573 | 349 | 922 | 242 | 138 | 380 | 222 | 118 | 340 | 90 | 519 | 0 | 77 | 96 | 235 | 21 | 311 | 78 | 19 | 0 |
| Intermediate No. 1 Powell street..... | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Mixed No. 1..... Middlesex Village..... | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| 2..... Varum Avenue..... | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Totals..... | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Summary..... | | | | | | | | | | | | | | | | | | | | | | | 257 | |

AUDITOR'S
FORTY-FOURTH ANNUAL REPORT
OF THE
RECEIPTS AND EXPENDITURES
OF THE
CITY OF LOWELL, MASS.

*TOGETHER WITH THE TREASURER'S ACCOUNT FOR THE
FINANCIAL YEAR ENDING DECEMBER 31. 1879.*



LOWELL, MASS.:

Printed by Campbell & Hanscom, Morning Times, 22 Central Street.
1880.

CITY OF LOWELL.

IN COMMON COUNCIL, January 13, 1880.

Read and sent to the Board of Aldermen.

DAVID CHASE, *Clerk*.

IN BOARD OF ALDERMEN, January 13, 1880.

Received and read.

SAMUEL A. McPHETRES, *City Clerk*.

AUDITOR'S REPORT
OF THE
RECEIPTS AND EXPENDITURES,
FOR THE YEAR ENDING DEC. 31, 1879.

AUDITOR'S REPORT.

CITY OF LOWELL, }
AUDITOR'S OFFICE, January 13, 1880. }

TO THE CITY COUNCIL:

Gentlemen—In accordance with the requirements of the Ordinances of the City, I have the honor to present the Forty-fourth Annual Report of the Receipts and Expenditures of the City of Lowell, for the financial year which terminated Dec. 31, 1879, with the details under the several departments. Annexed are schedules of the Real and Personal Property belonging to the City, a statement of the City Debt, and Debts due to the City.

RECEIPTS.

The whole amount of money received into the Treasury,
from all sources, from January 1, to December 31,
1879, was.....\$1,061,166 45

Of this amount there was received on
account of:

| | | |
|--------------------|----|------------|
| Taxes of 1877..... | \$ | 5 43 |
| Taxes of 1878..... | | 21,350 53 |
| Taxes of 1879..... | | 537,795 46 |
| Schools | | 380 86 |

Amount carried forward \$559,532 28

| | |
|---|----------------------------|
| <i>Amount brought forward</i> | \$559,532 28 |
| School Houses..... | 1,362 00 |
| Roads and Bridges..... | 22,116 57 |
| Reserved Fund..... | 39,301 97 |
| Paupers..... | 11,210 86 |
| Police..... | 4,380 86 |
| Fire Department..... | 1,061 25 |
| Sewers and Drains..... | 9,181 14 |
| Commons..... | 253 50 |
| Lighting Streets and Public Buildings... | 14 06 |
| Repairs of Public Buildings..... | 2,093 44 |
| City Library..... | 3,187 64 |
| Water Works..... | 110,185 34 |
| State Aid..... | 12,509 81 |
| Aid for Poor and Indigent Soldiers and Sailors..... | 5,037 81 |
| Interest..... | 2,685 06 |
| Corporation Tax..... | 23,641 89 |
| National Bank Tax..... | 3,410 97 |
| Temporary Loan..... | 250,000 00 |
| | <hr/> \$1,061,166 45 <hr/> |

EXPENDITURES.

The amount expended, and **ordered** to be paid from the Treasury, from January 1, to December 31, 1879, was.....\$1,090,389 42

These expenditures are **charged** to the following appropriations or accounts, viz :

| | |
|--|--------------|
| Schools..... | \$125,429 68 |
| School Houses..... | 17,608 74 |
| Roads and Bridges..... | 103,291 65 |
| Reserved Fund..... | 20,398 94 |
| Paupers..... | 46,461 43 |
| Police..... | 49,436 43 |
| Fire Department..... | 65,198 12 |
| Sewers and Drains..... | 66,819 82 |
| Commons..... | 2,403 51 |
| Printing and Advertising..... | 2,703 86 |
| Lighting Streets and Public Buildings... | 17,001 67 |
| Repairs of Public Buildings..... | 6,953 33 |
| City Library..... | 4,507 26 |
| Salaries..... | 16,833 75 |

Amount carried forward..... \$545,048 19

AUDITOR'S REPORT.

7

| | | |
|---|--------------|----------------|
| <i>Amount brought forward</i> | \$545,048 19 | |
| Health..... | 2,772 21 | |
| Water Works..... | 150,047 82 | |
| State Aid (Laws of 1866)..... | 5,168 89 | |
| State Aid (Laws of 1879)..... | 5,275 75 | |
| Aid for Poor and Indigent Soldiers and Sailors (Laws of 1878)..... | 1,337 31 | |
| Aid for Poor and Indigent Soldiers and Sailors (Laws of 1879)..... | 4,475 25 | |
| Interest..... | 33,019 87 | |
| City Debt..... | 22,500 00 | |
| National Bank Tax..... | 15,952 30 | |
| State Tax..... | 10,550 00 | |
| County Tax..... | 15,241 83 | |
| Temporary Loan..... | 250,000 00 | |
| Sinking Fund for the reduction of the Water Debt..... | 25,000 00 | |
| Sinking Fund for the payment of the Loan of 1876..... | 4,000 00 | |
| | <hr/> | \$1,090,389 42 |

The whole amount of expenditure during
the year 1879, was.....\$1,090,389 42

The whole amount of receipts during the
year 1879, was.....1,061,166 45

Excess of expenditures over receipts....

\$29,222 97

The balance in the Treasury, January 1,
1879, was.....\$ 74,574 91

The amount received into the Treasury,
during the year 1879, was.....1,061,166 45

Making a total of.....\$1,135,741 36

The amount paid from the Treasury,
during the year 1879, was.....1,091,030 92

The balance in the Treasury, December
31, 1879, was.....

\$44,710 44

The amount of the City Debt, January 1,
1879, was.....\$2,303,500 00

There has been paid on account of the
City Debt during the year 1879: To
Lowell Institution for Savings, a
note which became due June 1, 1879, \$21,000 00

Amounts carried forward.....\$21,000 00 \$2,303,500 00

| | | |
|---|-------------------|---------------------------|
| <i>Amounts brought forward</i> | \$21,000,00 | \$2,303,500 00 |
| To Edward Ordway, Trustee, a note which became due November 18, 1879..... | 1,500 00 | <u>\$22,500 00</u> |
| Total amount of the City Debt, January 1, 1880, was..... | | <u>\$2,281,000 00</u> |
| Decrease in the City Debt during the year | | <u><u>\$22,500 00</u></u> |
| The amount of the City Debt on account of Water Works, January 1, 1879, was..... | \$1,800,000 00 | |
| Deduct amount of Sinking Funds for the reduction of the same, Dec. 31, 1879, | <u>226,725 92</u> | |
| Net Debt of the City on account of Water Works, January 1, 1880,.... | | \$1,573,274 08 |
| The amount of the ordinary Debt of the City, January 1, 1879, was..... | \$503,500 00 | |
| Deduct amount of payments made on account of the same, during the year 1879 | <u>22,500 00</u> | |
| Net ordinary Debt of the City, January 1, 1880..... | | <u>\$481,000 00</u> |
| Total Net Debt of the City, January 1, 1880..... | | <u>\$2,054,274 08</u> |
| Decrease in the Net Debt of the City, during the year 1879..... | | <u><u>\$64,929 10</u></u> |

Respectfully submitted,

DAVID CHASE,

Auditor of Accounts.

APPROPRIATIONS AND EXPENDITURES.

THE AMOUNT OF THE SEVERAL APPROPRIATIONS MADE BY THE CITY COUNCIL DURING THE YEAR — THE AMOUNT OF THE UNEXPENDED BALANCE OF 1878 — THE TRANSFERS FROM ONE APPROPRIATION TO ANOTHER — THE AMOUNT RECEIVED INTO THE TREASURY FROM OTHER SOURCES THAN TAXES — THE EXPENDITURES IN DETAIL UNDER EACH APPROPRIATION, AND THE UNDRAWN BALANCES, DECEMBER 31, 1879 — ALSO, THE AMOUNT OF THE CITY DEBT — DEBTS DUE THE CITY — SCHEDULES OF REAL AND PERSONAL PROPERTY, ETC.

SCHOOLS.

| | |
|--|--------------------|
| Balance undrawn January 1, 1879..... | \$ 12,629 46 |
| Appropriated and assessed in 1879..... | 115,000 00 |
| | <hr/> \$127,629 46 |

RECEIVED INTO THE TREASURY.

| | |
|---|-----------------------|
| From Howard W. Foster, for tuition..... | \$ 7 50 |
| Arthur J. French, for tuition..... | 52 85 |
| Albertus H. Hilton, for tuition..... | 20 00 |
| ——— Lamson, for tuition..... | 5 00 |
| George Whiting, for tuition..... | 40 00 |
| Alice Besse, for tuition..... | 60 00 |
| Grace Besse, for tuition..... | 40 00 |
| Charles Morrill, Superintendent for books..... | 14 81 |
| | <hr/> |
| <i>Amounts carried forward.....</i> | \$240 16 \$127,629 46 |

| | | |
|--|----------|---------------------|
| <i>Amounts brought forward</i> | \$240 16 | \$127,629 46 |
| Alice T. Owens, for overdraft..... | 10 00 | |
| L. G. Howe, for chairs, tables, stove, etc..... | 25 15 | |
| Reserved Fund, for labor, etc..... | 15 57 | |
| Appropriation for Police, for brooms, brushes and mats..... | 14 98 | |
| Appropriation for Fire Department, for rent of rooms on Fourth street | 75 00 | |
| | <hr/> | 380 86 |
| | | <hr/> |
| | | <u>\$128,010 32</u> |

EXPENDITURES.

Paid SUPERINTENDENT OF PUBLIC
SCHOOLS:

| | | |
|---------------------------------|------------|----------|
| To Charles Morrill, salary..... | \$2,000 00 | |
| | <hr/> | 2,000 00 |

Paid for INSTRUCTION:

HIGH SCHOOL.

| | | |
|-------------------------------------|------------|----------|
| To Charles C. Chase, Principal..... | \$2,040 00 | |
| Edwin H. Lord..... | 1,720 00 | |
| James S. Russell..... | 900 00 | |
| Mary A. Webster..... | 730 00 | |
| Marietta Melvin..... | 630 00 | |
| Elizabeth McDaniels..... | 607 56 | |
| Harriet C. Hovey..... | 630 00 | |
| Charlotte E. Draper..... | 626 82 | |
| Alice J. Chase..... | 630 00 | |
| Helen L. Ham..... | 390 00 | |
| M. Jennie Keese..... | 240 00 | |
| Rose A. Jordan..... | 240 00 | |
| Hattie E. Morey..... | 155 74 | |
| | <hr/> | 9,540 12 |

BARTLETT SCHOOL.

| | | |
|----------------------------------|------------|--|
| To Samuel Bement, Principal..... | \$1,460 00 | |
| Marianne B. Kent..... | 550 00 | |
| Abbie E. French..... | 531 24 | |
| Mary E. Pike..... | 550 00 | |
| M. Ida Howe..... | 543 28 | |
| Edith A. Gove..... | 545 97 | |
| | <hr/> | |

| | | |
|--------------------------------------|------------|-------------|
| <i>Amounts carried forward</i> | \$4,180 49 | \$11,540 12 |
|--------------------------------------|------------|-------------|

Amounts brought forward..... \$4,180 49 \$11,540 12

Paid for INSTRUCTION :

| | | |
|--------------------------|--------|----------|
| Sophia P. Wetherbee..... | 550 00 | |
| Caroline E. Holt..... | 550 00 | |
| Belle A. Prescott..... | 420 00 | |
| Belle F. Bachelder..... | 15 63 | |
| Amy L. Tuck..... | 5 25 | |
| Ella L. Wright..... | 3 13 | |
| | <hr/> | 5,724 50 |

COLBURN SCHOOL.

| | | |
|--|------------|----------|
| To Albert L. Bacheller, Principal..... | \$1,460 00 | |
| Elizabeth W. Frost..... | 528 99 | |
| Sarah J. Crosby..... | 550 00 | |
| Susan M. Andrews..... | 550 00 | |
| Mary A. Hammill..... | 550 00 | |
| Kate G. McLaughlin..... | 550 00 | |
| Arvilla L. Reader..... | 550 00 | |
| Nellie F. Keefe..... | 19 00 | |
| | <hr/> | 4,757 99 |

EDSON SCHOOL.

| | | |
|--------------------------------------|------------|----------|
| To Calvin W. Burbank, Principal..... | \$1,458 12 | |
| Mary E. Stone..... | 550 00 | |
| Helen A. Bowers..... | 302 50 | ✓ |
| Maria C. R. Swan..... | 122 10 | |
| Anna A. Sargent..... | 201 40 | |
| Mary F. Carleton..... | 550 00 | |
| Fannie A. Scripture..... | 416 25 | |
| Mary A. Balch..... | 550 00 | |
| Lizzie N. Smith..... | 550 00 | |
| Nettie E. Carleton..... | 550 00 | |
| Katie J. Hayes..... | 85 75 | |
| Rosalie T. Burns..... | 180 00 | |
| Nellie F. Keefe..... | 84 75 | |
| Belle F. Bachelder..... | 92 50 | |
| Ida T. Hardy..... | 58 75 | |
| Katie F. Fay..... | 15 63 | |
| Luella E. Welch..... | 81 26 | |
| Clara A. Eaton..... | 23 00 | |
| Helen J. Gookin..... | 112 13 | |
| Rose A. Jordan..... | 68 74 | |
| | <hr/> | 6 052 88 |

FRANKLIN SCHOOL.

| | |
|------------------------------------|------------|
| To Frank F. Coburn, Principal..... | \$1,460 00 |
| Abbie F. Woodward..... | 550 00 |

Amounts carried forward..... \$2,010 00 \$28,075 49

Amounts brought forward..... \$2,010 00 \$28,075 49

Paid for INSTRUCTION:

| | | |
|-------------------------|--------|----------|
| Luella A. Wardwell..... | 550 00 | |
| Fannie M. Clark..... | 550 00 | |
| Etta M. Ramsdell..... | 419 02 | |
| Ella M. Plumado..... | 240 00 | |
| Alice M. Clark..... | 180 00 | |
| Mary F. Burnham..... | 90 63 | |
| | <hr/> | 4,039 65 |

GREEN SCHOOL.

| | | |
|-----------------------------------|----------|----------|
| To Albert L. Fisk, Principal..... | \$998 98 | |
| M. Jennie Keese..... | 439 04 | |
| Annie E. Richardson..... | 549 50 | |
| Lizzie A. Nolan..... | 550 00 | |
| Ruth B. Bailey..... | 550 00 | |
| Ida Sheldon | 550 00 | |
| Annie C. Howe..... | 550 00 | |
| Emma L. Davenport..... | 550 00 | |
| Mary A. Keyes..... | 438 21 | |
| R. Alice Johnson..... | 178 13 | |
| | <hr/> | 5,353 86 |

MANN SCHOOL.

| | | |
|-------------------------------------|------------|----------|
| To George H. Conley, Principal..... | \$1,333 72 | |
| Frances M. Webster..... | 554 50 | |
| Laura F. Howe..... | 550 00 | |
| Celestia P. Chase..... | 535 21 | |
| Julia M. Healey..... | 544 00 | |
| Nellie F. Murphy..... | 423 21 | |
| Mary Meade..... | 28 75 | |
| Eva M. Hardy..... | 6 00 | |
| Geneva M. Dunn..... | 2 00 | |
| | <hr/> | 3,977 39 |

MOODY SCHOOL.

| | | |
|-----------------------------------|------------|----------|
| To Joseph Peabody, Principal..... | \$1,460 00 | |
| Mary E. Way..... | 550 00 | |
| Helen A. Haggett..... | 550 00 | |
| Mary E. Hardman..... | 531 25 | |
| Cora V. Barnard..... | 550 00 | |
| Laura J. Pindar..... | 550 00 | |
| Sarah E. Bailey..... | 550 00 | |
| Frances E. Hardman..... | 550 00 | |
| Frances E. Garrity..... | 550 00 | |
| Minnie F. Wing..... | 18 75 | |
| | <hr/> | 5,860 00 |

| | | |
|-------------------------------------|--|-------------------|
| <i>Amount carried forward</i> | | <hr/> \$47,306 39 |
|-------------------------------------|--|-------------------|

SCHOOLS.

13

Amount brought forward..... \$47,306 39

Paid for INSTRUCTION:

VARNUM SCHOOL.

| | | |
|----------------------------|--------------|----------|
| To Arthur K. Whitcomb..... | \$1,460 00 ✓ | |
| Georgianna F. Vinton..... | 550 00 ✓ | |
| Harriet Bradley..... | 550 00 ✓ | |
| Sarah A. Bradley..... | 550 00 ✓ | |
| Sarah F. Dillingham..... | 472 50 | |
| Clara A. Hannaford..... | 550 00 | |
| Maria W. Roberts..... | 550 00 | |
| Minnie F. Wing..... | 41 25 | |
| | <hr/> | 4,723 75 |

TEACHER OF PENMANSHIP AND DRAWING.

| | | |
|--------------------------|------------|----------|
| To Bertram Harrison..... | \$1,108 24 | |
| | <hr/> | 1,108 24 |

TEACHER OF VOCAL MUSIC.

| | | |
|--------------------------|------------|----------|
| To George F. Willey..... | \$1,120 00 | |
| | <hr/> | 1,120 00 |

INTERMEDIATE SCHOOL.

| | | |
|---------------------------|----------|--------|
| To Viola A. Hamblett..... | 600 00 ✓ | |
| | <hr/> | 600 00 |

MIXED SCHOOLS.

| | | |
|--------------------------------------|----------|--------|
| No. 1 — To Elizabeth H. Cotting..... | \$550 00 | |
| | <hr/> | 550 00 |
| No. 2 — To Laura J. Gould..... | \$550 00 | |
| | <hr/> | 550 00 |

MILL SCHOOL.

| | | |
|-------------------------|---------|--------|
| To Mary F. Burnham..... | \$31 26 | |
| Katie F. Fay..... | 24 00 | |
| Belle F. Bachelder..... | 31 26 | |
| Mary J. McCarry..... | 25 00 | |
| | <hr/> | 111 52 |

PRIMARY SCHOOLS.

| | | |
|---------------------------------|----------|--------|
| No. 1 — To Hattie H. Eaton..... | \$550 00 | |
| | <hr/> | 550 00 |
| No. 2 — To Annie S. Harlow..... | \$550 00 | |
| | <hr/> | 550 00 |

Amount carried forward..... \$57,169 90

Amount brought forward..... \$57,169 90

Paid for INSTRUCTION :

PRIMARY SCHOOLS.

| | | |
|---------------------------------------|----------|-------------|
| No. 3 — To Abbie G. Watson..... | \$397 64 | |
| Harriet B. Frye..... | 91 24 | |
| | | 488 88 |
| No. 4 — To Lucy F. Carleton..... | \$550 00 | |
| | | 550 00 |
| No. 5 — To Ellen A. Stillings..... | \$550 00 | |
| | | 550 00 |
| No. 6 — To Alice M. Clark..... | 240 00 | |
| Ella M. Plumado..... | 180 00 | |
| | | 420 00 |
| No. 7 — To Martha S. Williams..... | \$550 00 | |
| | | 550 00 |
| No. 8 — To Martha A. Franklin..... | \$537 90 | |
| Delia L. Naylor..... | 4 50 | |
| | | 542 40 |
| No. 9 — To Nellie McDonald..... | \$423 21 | |
| | | 423 21 |
| No. 10 — To Martha A. Neal..... | \$550 00 | |
| Abbie V. Wheeler..... | 160 63 | |
| | | 710 63 |
| No. 11 — To Isabella V. McAnulty..... | \$550 00 | |
| | | 550 00 |
| No. 12 — To Minnie C. Smith..... | \$490 00 | |
| | | 490 00 |
| No. 13 — To Cornelia M. Davis..... | \$550 00 | |
| | | 550 00 |
| No. 14 — To Marietta Hill..... | \$550 00 | |
| | | 550 00 |
| No. 15 — To Abbie R. Worthley..... | \$550 00 | |
| | | 550 00 |
| No. 16 — To Nellie Kohawn..... | \$490 00 | |
| Anna Kohawn..... | 201 88 | |
| | | 691 88 |
| No. 17 — To Sarah C. Fiske..... | \$437 48 | |
| Mary F. Burnham..... | 70 00 | |
| | | 507 48 |
| No. 18 — To Eliza Cowley..... | \$550 00 | |
| | | 550 00 |
| No. 19 — To Alice T. Owens..... | \$430 00 | |
| | | 430 00 |
| No. 20 — To Susie J. Perkins..... | \$ 33 75 | |
| Mary L. McSorley..... | 301 88 | |
| | | 335 63 |
| <i>Amount carried forward</i> | | \$66,610 01 |

Amount brought forward..... \$66,610 01

Paid for INSTRUCTION:

PRIMARY SCHOOLS.

| | | |
|---------------------------------------|----------|-------------|
| No. 21 — To Nellie F. Baker..... | \$550 00 | 550 00 |
| No. 22 — To Ella E. Gardner..... | 550 00 | 550 00 |
| No. 23 — To Ellen A. Corbett..... | \$423 21 | |
| Marietta F. Crowley..... | 245 01 | 668 22 |
| No. 24 — To Ellen A. Bridge..... | \$550 00 | 550 00 |
| No. 25 — To Aurelia L. Howe..... | \$550 00 | 550 00 |
| No. 26 — To Charlotte E. Brown..... | \$550 00 | 550 00 |
| No. 27 — To Mary E. Drew..... | \$550 00 | |
| Ida T. Hardy..... | 53 12 | 603 12 |
| No. 28 — To Mary E. Corbett..... | \$423 21 | |
| Ida J. Flint..... | 93 88 | 517 09 |
| No. 29 — To Jennie F. Woodward..... | \$550 00 | 550 00 |
| No. 30 — To Alice L. Frye..... | \$550 00 | 550 00 |
| No. 31 — To Laura E. Lee..... | \$550 00 | 550 00 |
| No. 32 — To Ellen F. Coughlan..... | \$550 00 | 550 00 |
| No. 33 — To Amanda M. Hadley..... | \$550 00 | 550 00 |
| No. 34 — To Lizzie S. Lowe..... | \$550 00 | 550 00 |
| No. 35 — To Clara A. Emerson..... | \$550 00 | 550 00 |
| No. 36 — To Mary A. Beard..... | \$550 00 | 550 00 |
| No. 37 — To Mercina F. Whitehorn..... | \$490 00 | 490 00 |
| No. 38 — To Mary O. Kidder..... | \$550 00 | 550 00 |
| No. 39 — To Abby L. Sargent..... | \$550 00 | |
| Nellie G. Gilman..... | 48 50 | |
| Mary McLaughlin..... | 45 62 | |
| Helen S. Durgin..... | 11 00 | 655 12 |
| <i>Amount carried forward</i> | | \$77,243 56 |

Amount brought forward..... \$77,243 56

Paid for INSTRUCTION :

PRIMARY SCHOOLS.

| | | |
|--------------------------------------|----------|-------------|
| No. 40 — To Sarah E. Scales..... | \$550 00 | |
| | | 550 00 |
| No. 41 — To Lilla J. Greenhalge..... | \$550 00 | |
| | | 550 00 |
| No. 42 — To Lizzie M. Hadley.....✓ | \$550 00 | |
| | | 550 00 |
| No. 43 — To Nellie M. Brown..... | \$550 00 | |
| | | 550 00 |
| No. 44 — To Mary L. Hill..... | \$550 00 | |
| Mary J. Meade..... | 119 37 | |
| | | 669 37 |
| No. 45 — To Ellen M. White..... | \$550 00 | |
| | | 550 00 |
| No. 46 — To Ella A. Bailey..... | \$550 00 | |
| | | 550 00 |
| No. 47 — To Miranda W. Bradley..... | \$220 38 | |
| Mary J. A. Tibbetts..... | 35 00 | |
| Mary F. Beane..... | 162 00 | |
| Minnie F. Wing..... | 38 76 | |
| | | 456 14 |
| No. 48 — To Marion A. Scott..... | \$550 00 | |
| | | 550 00 |
| No. 49 — To Sara A. Swan.....✓ | \$550 00 | |
| | | 550 00 |
| No. 50 — To Marion J. Stevenson..... | \$423 21 | |
| Kate G. Jones..... | 82 37 | |
| Mary F. Burnham..... | 48 75 | |
| | | 554 33 |
| No. 51 — To Mary J. Alger..... | \$550 00 | |
| | | 550 00 |
| No. 52 — To Lucretia A. Day..... | 550 00 | |
| | | 550 00 |
| No. 53 — To Charlotte McDaniels..... | \$550 00 | |
| | | 550 00 |
| No. 54 — To Agnes I. Meldrum..... | 547 00 | |
| Helen J. Gookin..... | 3 00 | |
| | | 550 00 |
| No. 55 — To Nellie S. Danforth..... | \$ 21 25 | |
| Stella J. Allen..... | 299 36 | |
| | | 320 61 |
| No. 56 — To Elizabeth A. Balch..... | \$550 00 | |
| | | 550 00 |
| <i>Amount carried forward</i> | | \$86,394 01 |

SCHOOLS.

17

Amount brought forward..... \$86,394 01

Paid for INSTRUCTION :

PRIMARY SCHOOLS.

| | | |
|---------------------------------------|----------|-------------|
| No. 57 — To Belle T. Vinal..... | \$550 00 | |
| | | 550 00 |
| No. 58 — To Ellen M. Holden..... | \$537 90 | |
| Lottie M. Fernald..... | 4 50 | |
| | | 542 40 |
| No. 59 — To Alice T. Lee..... | \$423 21 | |
| Rose A. Jordan..... | 83 14 | |
| Luella E. Welch..... | 68 74 | |
| Nellie F. O'Grady..... | 66 75 | |
| Ida T. Hardy..... | 20 62 | |
| | | 662 46 |
| No. 60 — To Jennie C. Boardman..... | \$490 00 | |
| Henrietta Prescott..... | 81 87 | |
| | | 571 87 |
| No. 61 — To Nellie M. Brown..... | \$490 00 | |
| | | 490 00 |
| No. 62 — To Clara B. Horne..... | \$490 00 | |
| | | 490 00 |
| No. 63 — To Emma J. Miller..... | \$490 00 | |
| | | 490 00 |
| No. 64 — To Delia T. Brady..... | \$495 00 | |
| Mary J. McCarry..... | 51 75 | |
| Nellie F. O'Grady..... | 30 00 | |
| | | 576 75 |
| No. 65 — To M. Carrie Stiles..... | \$420 00 | |
| | | 420 00 |
| No. 66 — To Rosalie T. Burns..... | \$240 00 | |
| Katie F. Fay..... | 70 62 | |
| Helen A. Bowers..... | 34 00 | |
| Ida T. Hardy..... | 15 63 | |
| | | 360 25 |
| No. 67 — To Clementine H. Bowers..... | \$550 00 | |
| | | 550 00 |
| No. 68 — To Mary McLaughlin..... | 93 76 | |
| Helen S. Durgin..... | 56 25 | |
| | | 150 01 |
| | | <hr/> |
| | | \$92,247 75 |

Paid for SERVICES OF JANITORS :

| | | |
|--------------------------------------|------------|-------------|
| To John Donahue..... | \$651 00 | |
| Daniel Reynolds..... | 636 40 | |
| | | <hr/> |
| <i>Amounts carried forward</i> | \$1,287 40 | \$92,247 75 |

Amounts brought forward..... \$1,287 40 \$92,247 75

Paid for SERVICES OF JANITORS :

| | | | |
|----|------------------------|--------|----------|
| To | Andrew Maguire..... | 636 00 | |
| | Job Moody..... | 616 00 | |
| | W. N. Roberts..... | 607 00 | |
| | A. H. Livermore..... | 601 00 | |
| | Wyatt Stevens..... | 596 00 | |
| | Edwin E. Kelley..... | 574 00 | |
| | Patrick Quinn..... | 552 13 | |
| | Aaron Scadding..... | 429 00 | |
| | Dennis Kohawn..... | 337 50 | |
| | Joseph Convery..... | 284 00 | |
| | Eliza Freeman..... | 136 00 | |
| | Ellen Cogger..... | 143 00 | |
| | Ann Connors..... | 140 00 | |
| | Charles Holt..... | 94 11 | |
| | William Lovejoy..... | 80 70 | |
| | Michael McDermott..... | 62 00 | |
| | L. P. Little..... | 56 00 | |
| | Anfort Coburn..... | 38 85 | |
| | Marietta Hill..... | 33 85 | |
| | Aurelia L. Howe..... | 33 85 | |
| | Mary Barrington..... | 31 45 | |
| | Charles Price..... | 29 85 | |
| | F. A. Livermore..... | 18 50 | |
| | Owen F. Havey..... | 16 51 | |
| | Joseph Fields..... | 14 00 | |
| | W. E. Libby..... | 9 00 | |
| | | | 7,457 70 |

Paid for SERVICES OF TRUANT
OFFICERS :

| | | | |
|----|----------------------------|----------|----------|
| To | Bickford Lang..... | \$600 00 | |
| | Robert L. Read..... | 600 00 | |
| | William H. Bermingham..... | 600 00 | |
| | | | 1,800 00 |

Paid for BOOKS, STATIONERY, ETC. :

| | | | |
|----|---|----------|--------------|
| To | Boston School Supply Co. for "Munroe's Charts," exercise books and paper.. | \$ 38 40 | |
| | John A. Boyle, for "Munroe's Charts". | 75 00 | |
| | F. P. Coggeshall & Son, for books, sta- tionery, etc..... | 344 25 | |
| | | | |
| | <i>Amounts carried forward</i> | \$457 65 | \$101,505 45 |

Amounts brought forward..... \$457.65 \$101,505 45

Paid for BOOKS, STATIONERY, ETC. :

| | | |
|--|--------|----------|
| To F. P. Coggeshall, for books, stationery, etc..... | 627 89 | |
| Coughlin & Co., for books, stationery, etc. | 212 34 | |
| H. C. Church, for stationery..... | 2 75 | |
| C. C. Chase, for books..... | 6 30 | |
| Frost & Adams, for patterns..... | 9 52 | |
| Ginn & Heath, for globes, music charts, etc | 41 80 | |
| Charles Morrill, for cash paid for "Hop- kins' Atlas of Lowell," and slates | 15 00 | |
| Marston & Prince, for books, stationery, etc..... | 644 81 | |
| J. Merrill & Son, for books, stationery, etc..... | 856 49 | |
| N. E. School Furnishing Co., for litho- gram, slates, stationery, etc..... | 32 46 | |
| John L. Shorey, for books..... | 10 00 | |
| The Nursery, for books..... | 20 00 | |
| Abel Whitney, for books, stationery, etc. | 222 03 | |
| W. H. Worcester & Co., for Scientific American and Journal of Chemistry, | 8 00 | |
| William Ware & Co., for books..... | 481 10 | |
| | | 3,648 14 |

Paid for PRINTING, ADVERTISING,
BINDING, ETC. :

| | | |
|---|----------|--------------|
| To Bacheller, Dumas & Co., for blank books, binding, etc..... | \$ 89 20 | |
| Bufford's Publishing, Engraving and Lithographic House, for diplomas.. | 4 00 | |
| Leonard Brown, for printing..... | 61 40 | |
| Leonard Brown & Co., for printing..... | 28 75 | |
| Huse, Goodwin & Co., for printing and advertising..... | 437 44 | |
| Harrington Brothers, for advertising.... | 7 00 | |
| C. L. Knapp & Son, for printing and advertising..... | 131 50 | |
| Marden & Rowell, for printing and adver- tising..... | 74 25 | |
| Morning Times, for advertising..... | 5 25 | |
| Stone, Bacheller & Livingston, for print- ing and advertising..... | 82 75 | |
| W. S. Simons, for distributing reports and posting..... | 22 00 | |
| | | 943 54 |
| <i>Amount carried forward</i> | | \$106,097 13 |

Amount brought forward..... \$106,097 13

Paid for FUEL :

| | | |
|--|------------|------------|
| To Appropriation for Roads and Bridges, for fuel and labor..... | \$1,085 54 | |
| Reserved Fund, for coal..... | 278 04 | |
| Wm. E. Livingston, for coal..... | 97 70 | |
| Wm. E. Libby, for labor on fuel..... | 4 50 | |
| Whithed & Co., for coal..... | 2,298 39 | |
| | <hr/> | \$3,763 97 |

Paid for SUNDRIES :

| | | |
|---|----------|-------------------------|
| To Appropriation for School Houses, for lumber, nails, labor, etc..... | \$102 78 | |
| Appropriation for Roads and Bridges, for labor..... | 118 07 | |
| Appropriation for Repairs of Public Buildings, for labor, lumber, etc... | 841 04 | |
| Appropriation for Water Works, for use of water, meters, pipe, etc..... | 956 69 | |
| A. H. Abbott, for labor, iron, etc..... | 3 40 | |
| A. W. Butcher, for iron..... | 5 36 | |
| James Barris, for furnace rakes, staples, iron and labor..... | 4 60 | |
| Cole & Nichols, for grate bars and grates, | 146 85 | |
| Richard Dobbins, for castings, gaskets, labor and inspecting boilers..... | 83 07 | |
| Pevey Brothers, for desk irons and labor, | 175 75 | |
| T. Costello & Co., for radiators, stoves, grates, screws, pipe, couplings, traps, labor, etc..... | 802 95 | |
| J. L. Foote & Co., for zinc..... | 1 35 | |
| T. R. Garity, for pipe, couplings, valves, packing and labor..... | 240 93 | |
| John Gilchrist, for pipe, couplings, traps, cement and labor..... | 86 47 | |
| W. D. Harriman, for hinges..... | 3 00 | |
| S. G. Mack & Co., for stoves, grates, hods, cans, ventilator and labor... | 235 23 | |
| F. W. Proctor, for pipe, couplings, gauge and labor..... | 34 08 | |
| N. J. Wier & Co., for stoves, grates, dust pans, shovels, basins, labor, etc. | 38 99 | |
| H. H. Wilder & Co., for stoves, pipe, registers, collars, brick, solder, zinc, wire, mica, dippers, labor, etc..... | 519 86 | |
| Charles E. Adams, for hardware..... | 37 28 | |
| <i>Amounts carried forward</i> | <hr/> | \$4,437 75 \$109,861 10 |

Amounts brought forward..... \$4,437 75 \$109,861 110

Paid for SUNDRIES :

| | |
|--|--------|
| To Gardner L. Willard, for pipe, valves, and labor..... | 59 00 |
| T. H. Curtis, for keys..... | 1 40 |
| H. A. Fielding, for hardware..... | 19 71 |
| Rogers, Taylor & Co., for hardware.... | 39 38 |
| H. B. Shattuck, for hardware..... | 20 90 |
| Frederick Taylor, for hardware..... | 202 79 |
| Milton Aldrich, for screws..... | 95 |
| Otis Allen & Co., for lumber..... | 18 75 |
| Joseph C. Bachelder, for lumber and labor..... | 8 57 |
| A. L. Brooks & Co., for lumber..... | 8 13 |
| Griffin & Lake, for table legs and mould- ing..... | 16 03 |
| Howes & Burnham, for lumber..... | 67 41 |
| A. Keddie, for patterns and labor..... | 23 65 |
| William Kelley & Son, for windows, etc. | 36 50 |
| James F. Nourbourne, for lumber and labor..... | 15 85 |
| M. C. Pratt & Co., for lumber, doors, moulding and labor..... | 18 63 |
| F. & E. Bailey & Co., for thermometers, | 2 25 |
| G. C. Brock, for thermometers..... | 5 00 |
| C. B. Coburn & Co., for paint, asphal- tum, window cord, smalt, alcohol, papers, waste, rope, brushes, bask- ets, hose, couplings, etc..... | 290 36 |
| H. C. Church, for paper..... | 2 09 |
| Carleton & Hovey, for chemicals, etc... | 73 51 |
| Frost & Adams, for paper and labor... | 15 00 |
| French & Puffer, for baskets, pails, cans, and brooms..... | 36 93 |
| Fiske & Spalding, for window shades, fixtures and paper..... | 42 78 |
| J. P. Folsom, for cotton cloth..... | 3 72 |
| Charles Gould & Co., for soap..... | 14 75 |
| J. V. Keyes, for cotton cloth and cambric, | 1 98 |
| Jonathan Kendall, for shellac, alcohol, asphaltum, oil, etc..... | 38 87 |
| C. R. Kimball, for insect powder, etc.. | 2 50 |
| C. W. Lerner, for disinfectant and puri- fying powders..... | 21 68 |
| Russell & Cheney, for matches and brooms..... | 19 15 |

Amounts carried forward..... \$5,565 97 \$109,861 10

Amounts brought forward..... \$5,565 97 \$109,861 10

Paid for SUNDRIES :

| | |
|---|--------|
| To C. K. Russell & Son, for matches..... | 4 20 |
| C. P. Talbot & Co., for copperas | 3 90 |
| Whiting & Weston, for leather | 60 |
| Adams & Co., for feather dusters..... | 55 40 |
| Benner Brothers, for mats, enamelled cloth, and chairs..... | 130 64 |
| George H. Crafts, for re-seating chairs.. | 5 50 |
| Crosby Furniture Co., for labor on desks, | 39 50 |
| Gardner & Co., for perforated seats.... | 15 49 |
| J. L. Hammett, for desks, chair tops and ink wells..... | 129 40 |
| N. E. Mat Factory, for mats..... | 165 60 |
| Offutt & Whitaker, for chairs and stool. | 72 90 |
| J. F. Puffer & Son, for chairs..... | 10 75 |
| R. S. Clifford, for clocks, key and labor, | 37 50 |
| George Thatcher, for clocks, bells, labor, etc..... | 65 59 |
| Martin Kingman, for stamp..... | 4 50 |
| Kendall & Roberts, for tank.. | 6 85 |
| Belt and Leather Stuffing Co., for "Kid- der Gas Regulator"..... | 75 00 |
| Buffalo Dental Mfg. Co., for blow pipe and foot blower..... | 4 75 |
| H. B. & W. O. Chamberlin, for iron sul- phide | 3 90 |
| Hicks & Badger, for copper retort..... | 6 50 |
| William J. Rohrbeck, for chemical appar- atus..... | 45 82 |
| Edward Twitchell, for test tubes..... | 4 40 |
| W. S. Foote, for pitch pipes and express- ing..... | 91 80 |
| Austin & Carlton, for piano cover..... | 3 00 |
| Charles Dugan, for polishing pianos.... | 7 50 |
| Irvin A. Foote, for tuning pianos..... | 34 00 |
| Brooks, Owen & Carleton's Orchestra, for services at graduating exercises, and arranging music..... | 31 50 |
| C. C. Chase, for cash paid for use of piano and flowers..... | 15 00 |
| S. D. Butterworth, for mason work and material | 43 37 |
| William Clifford, for mason work..... | 2 50 |
| F. M. Merrill, for fire brick, kaolin, and labor..... | 78 02 |

Amounts carried forward..... \$6,761 35 \$109,861 10

Amounts brought forward..... \$6,761 35 \$109,861 10

Paid for SUNDRIES :

| | |
|---|--------|
| To D. Crowley, for ribbon..... | 12 23 |
| Bertram Harrison, for filling in High School Diplomas..... | 10 00 |
| C. E. Goddard, for ringing bell..... | 10 00 |
| Frank L. Morey, for ringing bell..... | 30 00 |
| Charles F. Scribner, for ringing bell.... | 20 00 |
| J. W. Cummiskey, for taking and recording census of school children... | 75 38 |
| James Duffy, for taking and recording census of school children..... | 73 23 |
| J. W. Tapley, for taking and recording census of school children..... | 83 98 |
| M. Leslie Allen, for mounting drawings, postal cards, tape, and services at exhibition of drawings..... | 24 75 |
| A. S. Cutler, for services at exhibition of drawings..... | 2 50 |
| Ella C. Green, for services at exhibition of drawings..... | 7 00 |
| Helen A. Whittier, for services at exhibition of drawings..... | 2 25 |
| Helen W. Wright, for services at exhibition of drawings..... | 4 00 |
| Charles Morrill, for cash paid for "Carney Medals," postage stamps, expressing, and travelling expenses of committee..... | 47 05 |
| Lowell Gas Light Co., for gas..... | 105 98 |
| Proprietors of Locks and Canals on Merrimack River, for rent of land on First street..... | 20 00 |
| George Sheldon, for rent of house and land on Grand street..... | 25 00 |
| L. G. Howe, for cash paid for labor, etc. | 4 44 |
| Catherine Sullivan, for labor..... | 10 00 |
| William Lovejoy, for labor..... | 5 00 |
| Boston & Maine Railroad, for transportation..... | 72 |
| Boston & Lowell Railroad, for transportation..... | 32 |
| Penniman & Co.'s Express, for transportation..... | 6 90 |
| H. O. Morse, for carriage hire..... | 8 50 |
| A. S. Brown, for labor with team..... | 2 00 |

Amounts carried forward..... \$7,352 58 \$109,861 10

Amounts brought forward..... \$7,352 58 \$109,861 10

Paid for SUNDRIES :

| | | |
|--|-------|--------------|
| To B. G. Brown, for labor with team..... | 6 00 | |
| Timothy Kelley, for labor with team.... | 1 00 | |
| Daniel P. Knowlton, for labor with team. | 1 00 | |
| Daniel McCarty, for labor with team.... | 3 50 | |
| D. Clark Pike, for labor with team..... | 2 50 | |
| William Roberts, for labor with team... | 27 50 | |
| | <hr/> | \$7,394 08 |
| | | <hr/> |
| | | \$117,255 18 |

EVENING SCHOOLS.

Paid for INSTRUCTION :

| | |
|------------------------------|----------|
| No. 1—To James F. Walsh..... | \$142 00 |
| R. Alice Johnson..... | 69 00 |
| Ada Martin..... | 71 00 |
| Hannah P. Wright..... | 71 00 |
| Emma L. Stiles..... | 41 00 |
| Charlotte E. Racao..... | 67 00 |
| Ella L. Wright..... | 72 00 |
| Mary F. Burnham..... | 39 00 |
| Mary J. Meade..... | 70 00 |
| Marietta F. Crowley..... | 68 00 |
| Mary L. McSorley..... | 38 00 |
| Mary E. Corbett..... | 37 00 |
| Gertrude Sheldon..... | 90 00 |
| Anna F. Anderson..... | 40 00 |
| Abbie V. Wheeler..... | 72 00 |
| Lottie M. Fernald..... | 72 00 |
| Rose A. Jordan..... | 29 00 |
| Mary A. Keyes..... | 7 00 |
| Nellie F. Murphy..... | 7 00 |
| Frances E. Morrill..... | 41 00 |
| Lizzie A. Brickett..... | 55 00 |
| Emma C. French..... | 28 00 |
| Alice T. Bates..... | 31 00 |
| Mary Butman..... | 31 00 |
| Frances M. Talbot..... | 31 00 |
| Belle F. Bachelder..... | 30 00 |
| Eva M. Hardy..... | 31 00 |
| Geneva M. Dunn..... | 31 00 |
| Ida E. Bisbee..... | 24 00 |
| Frances McDermott..... | 21 00 |

Amounts carried forward..... \$1,456 00 \$117,255 18

Amounts brought forward..... \$1,456 00 \$117,255 18

EVENING SCHOOLS.

Paid for INSTRUCTION :

| | |
|----------------------------------|-------|
| No. 2—To Frank B. Sherburne..... | 82 00 |
| Nellie A. Corbett..... | 40 00 |
| Frances M. Dennett..... | 51 00 |
| Clara A. Eaton..... | 40 00 |
| Ida J. Flint.....✓ | 68 00 |
| Hattie B. Frye..... | 68 00 |
| Anna Kohawn..... | 68 00 |
| Delia L. Naylor..... | 40 00 |
| Laura H. Palmer..... | 39 00 |
| Martha A. Paul..... | 68 00 |
| Mary A. Swan..... | 66 00 |
| Luella E. Welch..... | 68 00 |
| Josie Whitten..... | 67 00 |
| Minnie F. Wing..... | 41 00 |
| George P. Gardner..... | 56 00 |
| Mary McLaughlin..... | 27 00 |
| Mary McCarry..... | 27 00 |
| Nellie Keefe..... | 27 00 |
| Katie J. Hayes..... | 17 00 |
| Alice M. Sanborn..... | 27 00 |
| Lizzie F. Lamere..... | 27 00 |
| Nellie O'Grady..... | 26 00 |
| Flora H. Sprague..... | 27 00 |

\$2,523 00

| | |
|-----------------------------------|----------|
| No. 3—To Clarence E. Burnham..... | \$ 82 00 |
| Ida T. Hardy..... | 28 00 |
| M. Alice Bates..... | 41 00 |
| Lena A. Gookin..... | 66 00 |
| Helen J. Gookin..... | 66 00 |
| Kate G. Jones..... | 53 00 |
| Fred G. Daly..... | 52 00 |
| Katie F. Fox..... | 14 00 |
| Marion E. Green..... | 23 00 |
| Mary E. Rogers..... | 21 00 |
| Nettie M. Davis..... | 25 00 |
| Katie F. Fay..... | 10 00 |

\$3,004 00

| | |
|-------------------------------|---------|
| No. 4—To Stella J. Allen..... | \$38 75 |
| Mary J. A. Tibbets..... | 71 00 |
| Henrietta Prescott..... | 66 00 |

Amounts carried forward..... \$3,179 75 \$117,255 18

Amounts brought forward.....\$3.179 75 \$117,255 18

EVENING SCHOOLS.

Paid for INSTRUCTION :

| | |
|-----------------------------|------------|
| No. 4—To Mary F. Beane..... | 41 50 |
| Mary E. Carter..... | 41 00 |
| Amy L. Tuck..... | 72 00 |
| Hattie E. Morey..... | 31 00 |
| Eliza A. Davis..... | 38 75 |
| Laura H. Palmer..... | 31 00 |
| Minnie F. Wing..... | 30 00 |
| Ida T. Hardy..... | 27 00 |
| | <hr/> |
| | \$3,492 00 |

| | |
|--------------------------------|------------|
| High—To Stephen G. Bailey..... | 144 00 |
| | <hr/> |
| | \$3.636 00 |

Paid for SERVICES OF JANITORS :

| | |
|-----------------------|------------|
| To Joseph Field:..... | \$10 00 |
| Joseph Hovey..... | 68 00 |
| Thomas Mahan..... | 36 00 |
| Andrew Maguire..... | 61 00 |
| Owen Mehan..... | 51 00 |
| John H. Quinn..... | 75 00 |
| J. Sheridan..... | 26 00 |
| John J. Warren..... | 35 00 |
| John Donahue..... | 15 00 |
| | <hr/> |
| | \$4,013 00 |

Paid for SUNDRIES :

| | |
|---|---------|
| To Appropriation for School Houses for labor..... | \$39 67 |
| French & Puffer, for tub and bowls..... | 3 47 |
| Stickney & Spofford, for oil, wicks and chimney..... | 86 |
| T. R. Garity, for pipe, couplings and labor..... | 36 38 |
| Joshua Merrill & Son, for books, stationery, etc..... | 64 23 |
| Stone, Bacheller & Livingston, for printing..... | 12 00 |
| | <hr/> |

Amounts carried forward.....\$4,169 61 \$117,255 18

Amounts brought forward..... \$4,169 61 \$117,255 18

Paid for SUNDRIES :

| | | |
|---|--------|------------|
| To Morning Times, for advertising..... | 10 00 | |
| W. S. Simons, for posting..... | 13 50 | |
| Lowell Gas Light Co., for gas..... | 185 02 | |
| Daniel McCarthy, for labor with team.. | 3 50 | |
| William Roberts, for labor with team... | 3 00 | |
| | <hr/> | \$4,384 63 |

DRAWING SCHOOLS.

Paid for INSTRUCTION :

| | |
|-----------------------|------------|
| To Frank M. Howe..... | \$ 488 63 |
| Kirkley Hyde..... | 753 12 |
| F. W. Stickney..... | 230 00 |
| Pierre Millet..... | 140 00 |
| Helen W. Wright..... | 1,471 40 |
| M. Leslie Allen..... | 4 00 |
| | <hr/> |
| | \$3,087 15 |

Paid for SUNDRIES :

| | |
|---|--------|
| To W. N. Roberts, for services as janitor.. | 100 00 |
| Appropriation for School Houses, for lumber, labor, etc..... | 85 74 |
| A. L. Brooks & Co., for lumber..... | 88 |
| M. C. Pratt & Co., for lumber..... | 20 30 |
| T. R. Garity, for pipe, water fixtures, and labor..... | 178 24 |
| Frederick Taylor, for hardware..... | 18 37 |
| C. B. Coburn & Co., for brushes and pail..... | 1 73 |
| Charles H. Allen, for cash paid for plas- ter ornaments..... | 2 00 |
| Boston Architectural Terra Cotta Works, for models..... | 18 27 |
| John Evan, for plaster casts..... | 12 00 |
| Paul A. Garey, for models..... | 25 50 |
| Page & Walmsley, for models and cast- ings..... | 7 00 |
| C. L. Knapp & Son, for printing and ad- vertising..... | 19 25 |
| Marden & Rowell, for printing and ad- vertising..... | 15 67 |
| Morning Times, for advertising..... | 1 00 |
| | <hr/> |

Amounts carried forward..... \$3,593 10 \$121,639 81

Amounts brought forward..... \$3,593 10 \$121,639 81

Paid for SUNDRIES :

| | | |
|--|--------|--------------|
| To Stone, Bacheller & Livingston, for ad- vertising | 12 80 | |
| W. S. Simons, for posting bills..... | 3 00 | |
| Lowell Gas Light Co., for gas..... | 179 72 | |
| Penniman & Co.'s Express, for trans- portation..... | 25 | |
| William Roberts, for labor with team... | 1 00 | |
| | <hr/> | \$3,789 87 |
| Whole expenditure for the year..... | | \$125,429 68 |
| Balance undrawn January 1, 1880..... | | 2,580 64 |
| | | <hr/> |
| | | \$128,010 32 |
| | | <hr/> |

SCHOOL-HOUSES.

| | | |
|--|----------------------------|-------------|
| Balance undrawn January 1, 1879..... | \$ 2,241 51 | |
| Appropriated and assessed in 1879..... | 20,000 00 | |
| | <hr style="width: 100%;"/> | \$22,241 51 |

RECEIPTS.

Received on account of SCHOOL-
HOUSES :

| | | |
|---|----------------------------|----------------------------|
| From Appropriation for Schools, for lumber, nails, labor, etc..... | \$205 89 | |
| Appropriation for Police, for paint, var- nish, etc..... | 26 25 | |
| Appropriation for Fire Department, for lumber, paint, oil, glass, and labor. | 223 06 | |
| Appropriation for Commons, for paint, and oil..... | 4 23 | |
| Appropriation for Health, for paint, oil and labor..... | 11 95 | |
| Appropriation for Library, for lumber and labor..... | 8 45 | |
| Appropriation for Water Works, for lumber, paint, etc..... | 31 25 | |
| William Burns, for old barn..... | 20 00 | |
| L. G. Howe, for old material..... | 7 92 | |
| H. G. Holden, for old sash..... | 1 50 | |
| Patrick Quinn, for old boards..... | 1 50 | |
| Sarah K. Whipple, for overdraft on ac- count of land on Agawam street... | 270 00 | |
| Frank S. Berry, for rent of tenement on Kirk street..... | 375 00 | |
| J. J. Furbush, for rent of tenement on Kirk street..... | 175 00 | |
| | <hr style="width: 100%;"/> | \$1,362 00 |
| | | <hr style="width: 100%;"/> |
| | | \$23,603 51 |
| | | <hr style="width: 100%;"/> |

EXPENDITURES.

Paid for LAND AND SCHOOL-HOUSE
ON AGAWAM STREET:

| | |
|--|------------|
| To Sarah K. Whipple, for 15,464 feet of land on Agawam street..... | \$2,319 60 |
| Sundry persons, for labor as per pay rolls | 1,070 79 |
| Appropriation for Water Works, for pipe, labor, and use of water..... | 13 54 |
| A. L. Brooks & Co., for lumber..... | 479 62 |
| Griffin & Lake, for lumber, posts, rails, caps, bolts, labor, etc..... | 141 02 |
| Howes & Burnham, for lumber..... | 95 24 |
| William Kelley, for sash, doors and blinds | 99 50 |
| M. C. Pratt & Co., for lumber, moulding and labor..... | 631 26 |
| American Bolt Co., for rods, brackets and braces..... | 4 55 |
| A. W. Butcher, for iron..... | 8 21 |
| James Barris, for staples..... | 1 30 |
| Charles E. Adams, for hardware..... | 34 29 |
| H. A. Fielding, for hardware..... | 24 65 |
| Frederick Taylor, for hardware..... | 63 07 |
| Pevey Bros., for window weights..... | 16 55 |
| C. B. Coburn & Co., for glass, paint, oil, etc..... | 96 42 |
| Fiske & Spalding, for lead, whiting, benzine, etc..... | 7 62 |
| E. Van Noordan, for ventilator..... | 37 75 |
| L. Kittredge & Son, for drain pipe, powder, fuse, labor, etc..... | 44 66 |
| Rollins & Sargent, for plastering..... | 145 00 |
| O. A. Simpson, for cellar and brick work, per contract..... | 362 00 |
| Sweatt & Davis, for stone steps..... | 2 00 |
| William Waugh, for slating..... | 185 00 |
| C. L. Knapp & Son, for advertising.... | 1 25 |
| Morning Times, for advertising..... | 2 50 |
| Marden & Rowell, for advertising..... | 1 50 |
| Patrick Mears, for services as watchman | 18 00 |
| Boston & Maine R. R., for transportation | 48 |
| B. G. Brown, for labor with team..... | 52 00 |
| William Roberts, for labor with team... | 6 50 |
| Francis S. Smith, for labor with team... | 4 75 |

Amount carried forward..... *\$5,970 62

*Deduct amount refunded by Sarah K. Whipple, for 1,900 feet of land, \$270 00, making the cost of the land and building \$5,700 62.

Amount brought forward..... \$5,970 62

Paid for ADDITION TO EDSON SCHOOL-
HOUSE:

| | | |
|---|-----------|------------|
| To Sundry persons, for labor as per pay rolls | \$ 768 14 | |
| B. G. Brown, for drain pipe, labor, etc. | 484 77 | |
| S. D. Butterworth, for mason work and material..... | 196 37 | |
| F. M. Merrill, for mason work and material..... | 1,060 31 | |
| Sweatt & Davis, for window caps..... | 30 00 | |
| William Waugh, for slating..... | 200 00 | |
| Charles E. Adams, for hardware..... | 2 62 | |
| H. A. Fielding, for hardware..... | 11 26 | |
| Frederick Taylor, for hardware..... | 3 19 | |
| James Barris, for door dogs..... | 80 | |
| T. Costello & Co., for latrines, pipe, water fixtures and labor..... | 412 66 | |
| S. G. Mack & Co., for ventilators, gutters, conductors, registers, pipe and labor | 155 05 | |
| A. L. Brooks & Co., for lumber..... | 113 00 | |
| Davis & Sargent, for lumber..... | 21 23 | |
| Griffin & Lake, for lumber, posts, rails and labor..... | 86 09 | |
| Howes & Burnham, for lumber,..... | 180 46 | |
| J. G. Peabody & Sons, for sash and blinds..... | 96 50 | |
| M. C. Pratt & Co., for lumber, sash and blinds..... | 217 78 | |
| Whitney & Tibbetts, for lumber..... | 350 83 | |
| C. B. Coburn & Co., for paint and glass | 2 51 | |
| Fiske & Spalding, for lead, glass and shellac..... | 81 50 | |
| Sylvester Bean, for labor..... | 9 00 | |
| Timothy Kelley, for labor with team.... | 75 | |
| A. Merrill, for labor with team..... | 1 50 | |
| William Roberts, for labor with team... | 18 00 | |
| Francis S. Smith, for labor with team.. | 2 00 | |
| | | \$4,506 32 |

Paid for SUNDRIES:

| | | |
|---|------------|-------------|
| To Sundry persons, for labor as per pay rolls | \$2,532 59 | |
| Appropriation for Roads and Bridges, for gravel, edgestone, blacksmithing and services of engineer..... | 118 96 | |
| Appropriation for Fire Department, for lumber..... | 8 75 | |
| <i>Amounts carried forward</i> | \$2,660 30 | \$10,476 94 |

Amounts brought forward..... \$2,660 30 \$10,476 94

Paid for SUNDRIES :

| | |
|---|--------|
| To Appropriation for Sewers and Drains, for sewer assessments..... | 85 29 |
| Appropriation for Water Works, for use of water and lumber..... | 23 58 |
| Otis Allen & Co., for lumber..... | 105 86 |
| A. L. Brooks & Co., for lumber..... | 198 61 |
| J. C. Bachelder, for lumber..... | 16 95 |
| Davis & Sargent, for lumber..... | 99 74 |
| Griffin & Lake, for posts, rails, labor, etc. | 14 01 |
| Howes & Burnham, for lumber..... | 59 89 |
| A. Keddie, for labor on lumber..... | 2 75 |
| Keddie & Curtice, for labor on lumber.. | 5 35 |
| William Kelley, for window and blind... | 4 75 |
| M. C. Pratt & Co., for lumber, sash, etc. | 444 32 |
| J. G. Peabody & Sons, for sash..... | 2 40 |
| H. Whitney & Co., for lumber..... | 110 50 |
| Whitney & Tibbetts, for lumber..... | 156 86 |
| Leonard Huntress & Hoyt W. Hilton for posts | 24 50 |
| C. B. Stevens, for building stairs..... | 90 00 |
| Charles E. Adams, for hardware,..... | 3 55 |
| A. W. Butcher, for iron..... | 2 96 |
| H. A. Fielding, for hardware..... | 34 00 |
| Rice & Co., for wire cloth..... | 110 24 |
| Rogers, Taylor & Co., for hardware.... | 35 09 |
| Horace B. Shattuck, for hardware..... | 85 67 |
| Frederick Taylor, for hardware..... | 112 39 |
| George Thatcher, for bells and labor... | 13 50 |
| James Barris, for furnace bars, window hangers and labor..... | 9 25 |
| T. Costello & Co., for grates..... | 2 50 |
| D. Cushing & Co., for gutter, solder and labor..... | 34 86 |
| S. G. Mack & Co., for pails, tin, and labor | 79 57 |
| Pettingell Chimney Cap Co., for chimney caps | 20 00 |
| S. D. Butterworth, for mason work and material..... | 68 92 |
| Luther Kittredge & Son, for pipe and labor..... | 8 96 |
| F. M. Merrill, for mason work and ma- terial | 182 04 |
| D. M. Prescott, for whitening | 11 00 |

Amounts carried forward..... \$4,920 16 \$10,476 94

Amounts brought forward..... \$4,920 16 \$10,476 94

Paid for SUNDRIES :

| | |
|---|--------|
| To J. L. Powers, for mason work and material..... | 20 75 |
| Rollins & Sargent, for mason work and material..... | 69 00 |
| Charles Riley, for mason work and material..... | 105 00 |
| N. T. Staples & Sons, for pipe, bends and traps..... | 16 74 |
| Sweatt & Davis, for stone and labor.... | 14 60 |
| E. A. & A. T. Smith, for concrete..... | 485 72 |
| S. B. Tallant & Co., for concrete..... | 20 25 |
| William Waugh, for slate, tin, zinc and labor..... | 188 17 |
| Sylvester Bean, for paper and labor.... | 34 51 |
| C. B. Coburn & Co., for paint, oil, alcohol, spirits turpentine, varnish, rope, waste, glass, brushes, etc..... | 281 42 |
| Fiske & Spalding, for lead, glass, paper, oil, japan, brushes, etc..... | 155 04 |
| Jonathan Kendall, for paint, putty, shellac, japan, alcohol, varnish, etc..... | 84 01 |
| Wm. E. Livingston, for lime, cement, and sand..... | 3 15 |
| Stiles, Rogers & Co., for grass seed.... | 1 99 |
| S. N. Wood & Son, for grass seed..... | 1 98 |
| G. C. Brock, for condition powders..... | 50 |
| F. W. Cherrington, for architectural drawings..... | 25 00 |
| B. G. Brown, for stone, cement, pipe, sand, and labor with team..... | 247 54 |
| Anfort Coburn, for gravel and labor.... | 3 00 |
| James Cowell, for labor with team..... | 3 50 |
| E. Boyle, for labor with team..... | 2 00 |
| Thomas Hennessy, for labor..... | 2 50 |
| Timothy Kelley, for labor with team.... | 75 |
| Daniel P. Knowlton, for labor with team. | 10 50 |
| James C. Little, for labor with team.... | 6 00 |
| James Leach, for labor with team..... | 21 00 |
| D. McCarthy, for labor with team..... | 8 50 |
| Osborn Merrill, for labor with team.... | 2 00 |
| William Roberts, for labor with team... | 45 50 |
| Lnther Richards, for removing school-house on Charles street..... | 40 00 |
| J. T. Trask, for labor with team..... | 50 |

Amounts carried forward..... \$6,821 28 \$10,476 94

Amounts brought forward..... \$6,821 28 \$10,476 94

Paid for SUNDRIES :

| | | |
|---|--------|-------------------|
| To O. A. Simpson, for stone, labor with team, etc..... | 93 02 | |
| A. P. Young, for labor..... | 13 50 | |
| Hugh Green, for crops on land purchased on River street..... | 50 00 | |
| L. G. Howe, for keeping horse..... | 154 00 | |
| | <hr/> | \$7,131 80 |
| Whole expenditure for the year..... | | <hr/> \$17,608 74 |
| Balance undrawn January 1, 1880..... | | 5,994 77 |
| | | <hr/> |
| | | <hr/> \$23,603 51 |

ROADS AND BRIDGES.

| | | |
|--|-------------|-------------|
| Balance undrawn January 1, 1879..... | \$ 3,786 75 | |
| Appropriated and assessed in 1879..... | 60,000 00 | |
| | <hr/> | \$63,786 75 |

RECEIPTS.

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN JANUARY.

| | | |
|---|------------|-------------|
| From Appropriation, for Schools, for fuel and labor..... | \$ 57 00 | |
| Appropriation for School Houses, for labor and material..... | 18 37 | |
| Appropriation for Paupers, for fuel and labor..... | 719 10 | |
| Appropriation for Fire Department, for labor..... | 33 75 | |
| Appropriation for Sewers and Drains, for labor..... | 92 56 | |
| Appropriation for Lighting, for labor. | 40 95 | |
| Appropriation for Repairs of Public Buildings, for labor, etc..... | 57 23 | |
| Appropriation for Water Works, for labor..... | 31 61 | |
| Reserved Fund, for fuel and labor.... | 43 62 | |
| Patrick Horan, for fuel..... | 3 00 | |
| Daniel Burke, for fuel..... | 6 00 | |
| Jeremiah Daily, for fuel..... | 3 00 | |
| John Steadman, for gravel..... | 11 00 | |
| T. R. Garity, for edgestone..... | 31 68 | |
| C. H. Robbins, for stone..... | 34 00 | |
| | <hr/> | |
| <i>Amounts carried forward.....</i> | \$1,182 87 | \$63,786 75 |

Amounts brought forward..... \$1,182 87 \$63,786 75

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC :

IN JANUARY.

| | | |
|--|--------|------------|
| From A. G. Johnson, for brick..... | 4 20 | |
| S. B. Harris, for rent..... | 45 00 | |
| William H. Ray, for sidewalk assess- ment..... | 38 92 | |
| Augustus F. Howe, for sidewalk assess- ment..... | 41 38 | |
| Jane M. Morse, for sidewalk assess- ment..... | 88 77 | |
| J. F. Manahan, for sidewalk assess- ment..... | 142 81 | |
| Jeremiah Crowley, for sidewalk assess- ment | 28 01 | |
| James Riley, for sidewalk assessment | 10 27 | |
| Lowell Horse Railroad Co., for side- walk assessment..... | 21 80 | |
| | <hr/> | \$1,604 03 |

IN FEBRUARY.

| | | |
|---|------------------|-------------------|
| From Appropriation for Paupers, for labor and fuel..... | \$1,911 55 | |
| Appropriation for Sewers and Drains, for labor..... | 72 12 | |
| Appropriation for Lighting, for keeping horses, fuel, and labor..... | 361 40 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 15 40 | |
| Reserved Fund, for labor..... | 21 75 | |
| County of Middlesex, for labor..... | 14 25 | |
| John C. Woodward, for fuel..... | 37 25 | |
| Carll, Jewett & Swift, for paving..... | 7 79 | |
| Matthew Huntley, for sidewalk assess- ment..... | 60 44 | |
| Levi Dumas, for sidewalk assessment. | 27 80 | |
| Thomas Fields, for sidewalk asses- ment..... | 37 74 | |
| Enoch Messenger, for sidewalk assess- ment..... | 47 00 | |
| C. E. & G. L. Pierce, for sidewalk as- sessment | 49 11 | |
| <i>Amounts carried forward</i> | <hr/> \$2,663 60 | <hr/> \$65,390 78 |

Amounts brought forward..... \$2,663 60 \$65,390 78

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN FEBRUARY.

| | | |
|---|--------|------------|
| From Bridget McQuade, for sidewalk assess- ment..... | 23 23 | |
| John Moran, for sidewalk assessment. | 29 37 | |
| Heirs of John Nesmith, for sidewalk assessment..... | 37 28 | |
| Alfred Taylor, for sidewalk assess- ment..... | 20 12 | |
| Charles Stott, for sidewalk assessment. | 34 14 | |
| Charles Stott, for sidewalk assessment. | 73 12 | |
| Samuel Horn, for sidewalk assessment. | 97 85 | |
| Patrick Burgoyne, for sidewalk assess- ment..... | 19 17 | |
| Wamesit Power Co., for sidewalk as- sessment..... | 191 43 | |
| Rose M. Curtis, for sidewalk assess- ment..... | 20 91 | |
| G. T. Woodward, for sidewalk assess- ment..... | 32 64 | |
| | <hr/> | \$3,242 86 |

IN MARCH.

| | | |
|---|------------|-------------|
| From Appropriation for Schools, for fuel and labor..... | \$ 610 90 | |
| Appropriation for Paupers, for fuel and labor..... | 1,235 95 | |
| Appropriation for Fire Department, for fuel and labor..... | 134 24 | |
| Appropriation for Sewers and Drains, for labor..... | 42 00 | |
| Appropriation for Lighting, for labor.. | 16 20 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 9 50 | |
| Appropriation for Water Works, for keeping horse, and labor..... | 47 60 | |
| Reserved Fund, for fuel and labor..... | 25 37 | |
| County of Middlesex, for labor..... | 4 50 | |
| Bernard Riley, for use of derrick..... | 8 00 | |
| R. G. Bartlett, for edgestone..... | 13 83 | |
| James Daily, for sidewalk assessment. | 8 64 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$2,156 73 | \$68,633 64 |

Amounts brought forward..... \$2,156 73 \$68,633 64

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC. :

IN MARCH.

| | | |
|---|--------|------------------|
| From Elijah Page, for sidewalk assessment.. | 42 24 | |
| Greenwood Bros., for sidewalk assessment..... | 43 25 | |
| B. F. Simpson, for sidewalk assessment..... | 31 72 | |
| Dominick McEvoy, for sidewalk assessment..... | 9 93 | |
| Joseph W. Smith, for sidewalk assessment..... | 26 78 | |
| Hugh McEvoy, for sidewalk assessment..... | 68 28 | |
| George W. Young, for sidewalk assessment..... | 208 88 | |
| William Cogan, for sidewalk assessment..... | 17 04 | |
| Henry C. Cooper, for sidewalk assessment..... | 54 90 | |
| Charles D. Starbird, for sidewalk assessment..... | 20 41 | |
| Henry Boyd, for sidewalk assessment..... | 7 92 | |
| | | <hr/> \$2,688 08 |

IN APRIL.

| | | |
|---|------------|-------------|
| From Appropriation for Schools, for labor and fuel..... | \$ 89 49 | |
| Appropriation for School Houses, for labor..... | 1 90 | |
| Appropriation for Paupers, for fuel, labor, etc..... | 1,237 22 | |
| Appropriation for Police, for labor, etc. | 6 38 | |
| Appropriation for Fire Department, for labor..... | 10 80 | |
| Appropriation for Sewers and Drains for labor..... | 70 04 | |
| Appropriation for Lighting, for labor.. | 7 30 | |
| Appropriation for Water Works, for labor..... | 15 80 | |
| Reserved Fund, for labor..... | 46 25 | |
| County of Middlesex, for labor..... | 3 00 | |
| | | <hr/> |
| <i>Amounts carried forward</i> | \$1,488 18 | \$71,321 72 |

Amounts brought forward..... \$1,488 18 \$71,321 72

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC. :

IN APRIL.

| | |
|---|--------|
| From Ephraim F. Hayden, for labor, etc.... | 35 20 |
| Philip Connors, for wheels..... | 12 00 |
| Thomas Jeffries, for labor, etc..... | 23 98 |
| John Biggs, for labor, etc..... | 22 00 |
| Henry Healey, for labor, etc..... | 19 36 |
| George Webster, for labor, etc..... | 33 70 |
| James Bassett, for labor, etc..... | 2 30 |
| T. L. P. Lamson, for street scrapings. | 2 50 |
| J. A. Burt, for street scrapings..... | 75 |
| P. C. Moxley, for edgestone..... | 56 95 |
| George E. Hutchinson, for horse..... | 50 00 |
| Stephen B. Puffer, for horse..... | 50 00 |
| W. S. Gordon, for sidewalk assessment | 48 10 |
| Belvidere Woolen Co., for sidewalk as- essment..... | 63 65 |
| Anna M. McCann, for sidewalk assess- ment..... | 89 96 |
| Thomas Curley, for sidewalk assess- ment..... | 25 35 |
| James Higgins, for sidewalk assess- ment..... | 11 61 |
| Sarah M. Larrabee, for sidewalk as- essment..... | 50 76 |
| Mrs. N. L. Wheeler, for sidewalk as- essment..... | 51 89 |
| Richard Pendergast, for sidewalk as- essment..... | 20 30 |
| James Shepherd, for sidewalk assess- ment..... | 34 14 |
| Margaret Flynn, for sidewalk assess- ment..... | 32 05 |
| Gerry Wilson, for sidewalk assessment | 24 67 |
| Thomas Ripley for sidewalk assessment | 30 15 |
| Catherine McManus, for sidewalk as- essment..... | 130 53 |
| Mrs. Samuel Garland, for sidewalk as- essment..... | 77 64 |
| Heirs of J. B. French, for sidewalk as- essment..... | 165 12 |

Amounts carried forward..... \$2,652 84 \$71,321 72

Amounts brought forward..... \$2,652 84 \$71,321 72

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC. :

IN APRIL.

| | | |
|---|-------|----------|
| From Henry F. Durant, for sidewalk assess- ment..... | 61 86 | |
| Patrick Joyce for sidewalk assessment. | 13 44 | |
| Wm. E. Livingston, for sidewalk as- sessment..... | 81 25 | |
| Joanna Welch, for sidewalk assessment | 27 36 | |
| George Flint, for sidewalk assessment. | 68 54 | |
| Patrick McCann, for sidewalk assess- ment..... | 35 09 | |
| Thomas Knowles, for sidewalk asses- ment..... | 13 58 | |
| Patrick Heeren, for sidewalk assess- ment..... | 12 09 | |
| | <hr/> | 2,966 05 |

IN MAY.

| | |
|---|----------|
| From Appropriation for Schools, for fuel and labor | \$ 66 25 |
| Appropriation for Paupers, for labor.. | 729 80 |
| Appropriation for Fire Department, for fuel and labor..... | 171 21 |
| Appropriation for Sewers and Drains, for labor..... | 244 02 |
| Appropriation for Lighting, for labor.. | 14 98 |
| Appropriation for Repairs of Public Buildings, for fuel and labor..... | 82 77 |
| Reserved Fund, for fuel and labor.... | 125 63 |
| Nashua & Lowell Railroad Corporation, for labor..... | 59 24 |
| Patrick Navin, for fuel..... | 3 00 |
| Michael Farrell, for wood..... | 3 00 |
| Frank Conroy, for stone..... | 2 87 |
| John Boyle, for labor, etc..... | 9 75 |
| Henry Emery, for street scrapings.... | 104 00 |
| James W. Bennett, for labor and edge- stone | 68 63 |
| Daniel Murphy, for labor and edgestone | 36 10 |
| John L. Meadowcroft, for brick..... | 12 00 |
| Wm. Eacott, for sidewalk assessment. | 115 66 |

Amounts carried forward..... \$1,848 91 \$74,287 77

Amounts brought forward..... \$1,848 91 \$74,287 77

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN MAY.

| | | |
|---|--------|----------|
| From H. A. & G. O. Whiting, for sidewalk assessment | 114 84 | |
| H. A. & G. O. Whiting, for sidewalk assessment | 92 91 | |
| Peter Cogan, for sidewalk assessment. | 17 04 | |
| Peter Cogan, for sidewalk assessment. | 37 13 | |
| Peter Gray, for sidewalk assessment.. | 23 37 | |
| Heirs of G. J. Bradt, for sidewalk assessment..... | 182 10 | |
| Frank Conroy, for sidewalk assessment | 12 57 | |
| Heirs of Redmond Welch, for sidewalk assessment | 16 41 | |
| John F. Manahan, for sidewalk assessment..... | 36 69 | |
| John Biggs, for sidewalk assessment.. | 56 46 | |
| W. S. C. Sargent, for sidewalk assessment..... | 35 93 | |
| Elizabeth Miller, for sidewalk assessment..... | 53 44 | |
| Levi Nichols, for sidewalk assessment. | 77 00 | |
| Proprietors of Locks and Canals, for sidewalk assessment..... | 45 65 | |
| | <hr/> | 2,650 45 |

IN JUNE.

| | | |
|---|----------|-------------|
| From Appropriation for Schools, for labor... | \$ 5 00 | |
| Appropriation for Paupers, for labor and fuel..... | 346 85 | |
| Appropriation for Police, for labor... | 2 75 | |
| Appropriation for Fire Department, for labor..... | 15 30 | |
| Appropriation for Sewers and Drains, for labor..... | 265 63 | |
| Appropriation for Commons, for keeping horse | 9 00 | |
| Appropriation for Lighting, for keeping horse, etc..... | 29 75 | |
| Appropriation for Health, for labor... | 98 91 | |
| Appropriation for Water Works, for labor and keeping horse..... | 33 00 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$806 19 | \$76,938 22 |

Amounts brought forward..... \$806 19 \$76,938 22

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN JUNE.

| | | |
|---|-------|----------|
| From Patrick Moran, for pigs..... | 5 00 | |
| John C. Woodward, for fuel..... | 40 00 | |
| O. A. Simpson for stone..... | 11 25 | |
| Mary J. Green, for sidewalk assessment | 22 22 | |
| John G. Stedman, for sidewalk assess- ment | 91 44 | |
| James Carr, for sidewalk assessment.. | 10 75 | |
| A. C. Wheelock, for sidewalk assess- ment | 9 12 | |
| | <hr/> | \$995 97 |

IN JULY.

| | | |
|--|----------|----------|
| From Appropriation for Paupers, for fuel and labor | \$249 70 | |
| Appropriation for Police, for labor.... | 29 54 | |
| Appropriation for Sewers and Drains, for labor..... | 253 12 | |
| Appropriation for Fire Department, for labor..... | 38 05 | |
| Appropriation for Commons, for keep- ing horse..... | 2 50 | |
| Appropriation for Lighting, for labor.. | 28 47 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 3 00 | |
| Appropriation for Health, for labor... | 37 50 | |
| Appropriation for Water Works, for labor..... | 26 50 | |
| Edward Conroy, for fuel..... | 12 00 | |
| George B. Goodale, for fuel..... | 13 00 | |
| Patrick Kelley, for fuel..... | 12 00 | |
| Benjamin F. Butler, for sidewalk assessment..... | 212 90 | |
| Timothy Sullivan, for sidewalk assess- ment | 21 65 | |
| | <hr/> | \$939 93 |

IN AUGUST.

| | | |
|---|----------|-------------|
| From Appropriation for Schools, for fuel and labor | \$243 10 | |
| <i>Amounts carried forward</i> | \$243 10 | \$78,874 12 |

Amounts brought forward..... \$243 10 \$78,874 12

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN AUGUST.

| | | |
|---|--------|----------|
| From Appropriation for Paupers, for fuel and labor..... | 389 63 | |
| Appropriation for Fire Department, for labor, etc..... | 36 29 | |
| Appropriation for Sewers and Drains, for labor..... | 225 87 | |
| Appropriation for Lighting, for labor, etc | 12 84 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 3 49 | |
| Reserved Fund, for fuel and labor.... | 84 99 | |
| Edward Conroy, for fuel..... | 6 00 | |
| Patrick Holden, for fuel..... | 3 00 | |
| Patrick Nevins, for fuel..... | 3 00 | |
| George Runels, for edgestone..... | 18 48 | |
| Charles D. Starbird, for edgestone.... | 8 25 | |
| Timothy Bascom, for labor..... | 2 00 | |
| Nashua & Lowell Railroad, for labor.. | 13 25 | |
| Joseph A. Patten, for sidewalk assess-ment..... | 15 69 | |
| George B. Farnham, for sidewalk as- sessment..... | 131 15 | |
| | <hr/> | 1,197 03 |

IN SEPTEMBER.

| | | |
|---|----------|-------------------|
| From Appropriation for Paupers, for fuel and labor..... | \$256 80 | |
| Appropriation for Fire Department, for labor, etc..... | 33 90 | |
| Appropriation for Sewers and Drains, for labor..... | 265 58 | |
| Appropriation for Lighting, for labor, etc | 12 99 | |
| Appropriation for health, for labor.... | 78 00 | |
| Appropriation for Water Works, for labor, etc..... | 56 71 | |
| James W. Bennett, for edgestone..... | 4 27 | |
| | <hr/> | 708 25 |
| <i>Amount carried forward</i> | | <hr/> \$80,779 40 |

Amount brought forward..... \$80,779 40

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN OCTOBER.

| | | |
|--|--------|----------|
| From Appropriation for Schools, for fuel.... | 36 62 | |
| Appropriation for Paupers, for fuel and labor..... | 283 75 | |
| Appropriation for Fire Department, for labor etc..... | 19 90 | |
| Appropriation for Sewers and Drains, for labor..... | 408 54 | |
| Appropriation for Lighting, for labor, etc..... | 39 67 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 4 00 | |
| Appropriation for Health, for labor... | 39 00 | |
| Appropriation for Water Works, for labor and keeping horse..... | 26 63 | |
| Reserved Fund, for labor..... | 3 00 | |
| Patrick Nevins, for fuel | 3 00 | |
| D. M. Wills, for edgestone..... | 18 10 | |
| Heirs of Joshua Swan, for sidewalk as- sessment..... | 44 91 | |
| Heirs of John Higgins, for sidewalk as- sessment..... | 6 72 | |
| H. C. & J. F. Howe, for sidewalk as- sessment..... | 32 50 | |
| Charles Hibbert, for sidewalk assess- ment..... | 19 75 | |
| Francis Scott, for sidewalk assessment. | 18 56 | |
| | <hr/> | 1,004 65 |

IN NOVEMBER.

| | | |
|--|----------|-------------|
| From Appropriation for Schools, for fuel and labor..... | \$ 35 50 | |
| Appropriation for School Houses, for labor..... | 1 00 | |
| Appropriation for Paupers, for fuel and labor..... | 362 00 | |
| Appropriation for Fire Department, for labor, etc..... | 28 65 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$427 15 | \$81,784 05 |

Amounts brought forward..... \$427 15 \$81,784 05

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC. :

IN NOVEMBER.

| | | |
|--|--------|----------|
| From Appropriation for Sewers and Drains, for labor, etc..... | 214 21 | |
| Appropriation for Commons, for labor. | 128 82 | |
| Appropriation for Lighting, for labor, etc | 37 25 | |
| Appropriation for Health, for labor.... | 40 50 | |
| Appropriation for Water Works, for labor, etc..... | 19 50 | |
| Reserved Fund, for labor, etc..... | 10 25 | |
| First Congregational Church, for coal. | 32 67 | |
| John O'Hearn, for edgestone..... | 15 07 | |
| Mrs. Walter Wright, for sidewalk as- sessment..... | 59 18 | |
| Betsey Clapp, for sidewalk assessment. | 15 81 | |
| Ellen Cotter, for sidewalk assessment. | 17 96 | |
| Patrick Crowe, for sidewalk assessment | 14 00 | |
| Jeremiah Dunn, for sidewalk assess- ment..... | 26 00 | |
| Benjamin F. Butler, for sidewalk as- sessment..... | 72 00 | |
| Henry C. Pike, for sidewalk assessment | 20 64 | |
| George Baron, for sidewalk assessment | 51 62 | |
| Leonard Kimball, for sidewalk assess- ment..... | 54 54 | |
| Richard Kitson, for sidewalk assess- ment..... | 137 02 | |
| Laura W. Pearson, for sidewalk assess- ment..... | 25 20 | |
| John Griffin, for sidewalk assessment. | 13 89 | |
| | | 1,433 28 |

IN DECEMBER.

| | | |
|--|------------|-------------|
| From Appropriation for Schools, for fuel and labor..... | \$ 116 75 | |
| Appropriation for School Houses, for labor, etc..... | 62 81 | |
| Appropriation for Paupers, for fuel and labor..... | 1,352 10 | |
| Appropriation for Commons, for labor. | 75 | |
| <i>Amounts carried forward</i> | \$1,532 41 | \$83,217 33 |

Amounts brought forward..... \$1,532 41 \$83,217 33

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC.:

IN DECEMBER.

| | | |
|---|--------|--|
| From Appropriation for Fire Department, for labor, etc..... | 111 62 | |
| Appropriation for Lighting, for labor, etc..... | 25 14 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 75 | |
| Appropriation for Water Works, for labor, etc..... | 18 75 | |
| Reserved Fund, for labor, etc..... | 67 87 | |
| Patrick Fay, for labor..... | 1 00 | |
| Sweatt & Davis, for stone..... | 67 95 | |
| A. L. Ready, for old junk..... | 4 06 | |
| John C. Woodward, for fuel..... | 78 42 | |
| Patrick Nevins, for fuel..... | 3 00 | |
| James Duffy, for fuel..... | 3 00 | |
| Alfred Day, for old plank..... | 6 76 | |
| James Higgins, for sidewalk assessment | 23 93 | |
| Jeremiah Wrenn, for sidewalk assessment..... | 14 00 | |
| F. H. Chandler, for sidewalk assessment..... | 64 13 | |
| Stephen Cutter, for sidewalk assessment | 33 14 | |
| James W. Bennett, for sidewalk assessment..... | 52 67 | |
| David Kennedy, for sidewalk assessment..... | 48 95 | |
| Darius Whithed, for sidewalk assessment..... | 22 29 | |
| Heirs of William P. Webster, for sidewalk assessment..... | 17 78 | |
| Patrick Reagan, for sidewalk assessment..... | 20 72 | |
| James Berry, for sidewalk assessment. | 18 70 | |
| Jacob Baron, for sidewalk assessment. | 57 57 | |
| H. A. & S. A. Coburn, for sidewalk assessment..... | 43 40 | |
| David O'Halloran, for sidewalk assessment..... | 17 88 | |
| Charles C. Coburn, for sidewalk assessment..... | 21 85 | |

Amounts carried forward..... \$2,377 74 \$83,217 33

Amounts brought forward..... \$2,377 74 \$83,217 33

Received for SIDEWALK ASSESS-
MENTS, MATERIALS, LABOR,
ETC. :

IN DECEMBER.

| | | |
|---|-------------|--------------|
| From Cyrus P. Barclay, for sidewalk assess- ment | 17 15 | |
| Isaac Kimball, for sidewalk assessment | 43 07 | |
| John Barrington, for sidewalk assess- ment | 14 00 | |
| Michael McMorrow, for sidewalk assess- ment | 54 23 | |
| Francis McGuire, for sidewalk assess- ment | 18 48 | |
| Samuel Temple, for sidewalk assess- ment | 35 82 | |
| Ann Duffy, for sidewalk assessment.. | 21 12 | |
| Charlotte B. Varnum, for sidewalk as- sessment | 21 50 | |
| Frank T. Thissell, for sidewalk assess- ment | 3 87 | |
| St. John's Church, for sidewalk assess- ment | 47 70 | |
| Freeman B. Shedd, for sidewalk assess- ment | 31 31 | |
| | <hr/> | \$2,685 99 |
| | | <hr/> |
| | | \$85,903 32 |
| Transferred from National Bank Tax Ac- count | \$ 2,500 00 | |
| Transferred from Reserved Fund | 15,000 00 | |
| | <hr/> | 17,500 00 |
| | | <hr/> |
| | | \$103,403 32 |
| | | <hr/> <hr/> |

EXPENDITURES.

Paid SUPERINTENDENT OF STREETS
AND CIVIL ENGINEER :

| | | |
|--|------------|------------|
| To John C. Woodward, Superintendent of Streets (salary) | \$1,625 00 | |
| George E. Evans, Civil Engineer (salary) | 2,175 00 | |
| | <hr/> | \$3,800 00 |
| | | <hr/> |
| <i>Amount carried forward</i> | | \$3,800 00 |

Amount brought forward..... \$3,800 00

Paid SUNDRY PERSONS FOR LABOR,
as per monthly pay rolls :

| | | |
|-----------------|------------|-----------------|
| In January..... | \$4,288 16 | |
| February | 2,719 93 | |
| March..... | 3,200 05 | |
| April..... | 3,133 63 | |
| May | 4,373 75 | |
| June | 4,188 56 | |
| July | 4,559 99 | |
| August..... | 4,771 58 | |
| September | 4,895 08 | |
| October..... | 4,645 26 | |
| November | 3,100 93 | |
| December..... | 2,462 69 | |
| | | <hr/> 46,339 61 |

Paid for HAY, GRAIN, ETC.:

| | |
|---|-----------|
| To Appropriation for Paupers, for hay, straw, and carrots..... | \$ 189 44 |
| Smith Adams, for hay..... | 170 76 |
| Nathaniel Brinley, for hay..... | 239 12 |
| Sewall Bowers, for hay..... | 41 68 |
| H. A. & S. A. Coburn, for hay..... | 75 84 |
| S. Clough, for hay..... | 266 80 |
| W. O. Cummings, for hay..... | 36 56 |
| J. B. Cheney, for hay..... | 16 87 |
| Henry Emery, for hay..... | 248 35 |
| Foye & Murphy, for meal and shorts... | 158 98 |
| W. P. Foye, for meal and corn..... | 129 30 |
| E. L. Ford, for hay..... | 101 02 |
| William Giles, for straw..... | 9 03 |
| Hall & Peabody, for meal, corn, etc.... | 245 63 |
| A. W. Howe, for carrots..... | 65 74 |
| Wm. E. Livingston, for meal, corn and oats | 1,195 02 |
| R. C. Lord, for straw | 6 52 |
| J. I. Murch, for cracked corn and shorts | 114 30 |
| W. Parkhurst, for hay..... | 23 65 |
| Stiles, Rogers & Co., for meal, corn, shorts and straw..... | 249 12 |
| George E. Stanley, for hay | 146 14 |
| S. S. Sleeper, for hay..... | 97 50 |
| Thomas W. Simpson, for hay | 58 52 |
| T. J. Underwood, for hay | 89 90 |

Amounts carried forward..... \$3,975 79 \$50,139 61

Amounts brought forward..... \$3,975 79 \$50,139 61

Paid for HAY, GRAIN, ETC.:

| | | |
|---|--------|----------|
| To S. N. Wood & Son, for meal, corn and oats | 910 36 | |
| A. D. Greeley, for straw..... | 17 97 | |
| Seth Gage, for hay | 268 75 | |
| | <hr/> | 5,172 87 |

Paid for FUEL:

| | | |
|--|----------|----------|
| To Robert Blanchard, for wood..... | \$ 43 50 | |
| J. E. Conant & Co., for wood..... | 78 06 | |
| Josiah Corner, for coal..... | 86 25 | |
| Gage & Jones, for wood..... | 777 62 | |
| Wm. E. Livingston, for coal | 15 87 | |
| Robinson & Butler, for wood..... | 636 84 | |
| A. C. Varnum, for wood..... | 440 50 | |
| Whithed & Co., for coal..... | 210 28 | |
| Michael Cavanaugh, for sawing wood... | 10 25 | |
| Patrick Devlin, for sawing wood..... | 37 50 | |
| Michael Farrell, for sawing wood..... | 16 25 | |
| William Husband, for sawing wood..... | 126 25 | |
| Andrew McCaffrey, for sawing wood.... | 29 00 | |
| Timothy O'Brien, for sawing wood..... | 2 00 | |
| David O'Neil, for sawing wood..... | 53 50 | |
| Jeremiah Ready, for sawing wood..... | 40 00 | |
| Peter Slavin, for sawing wood..... | 57 00 | |
| Joel Thurston, for sawing wood..... | 12 25 | |
| Samuel Newhall, for measuring wood... | 6 25 | |
| Boston & Lowell Railroad, for freight on coal | 18 75 | |
| | <hr/> | 2,697 92 |

Paid for LUMBER, STONE, BRICK,
CONCRETE, ETC.:

| | | |
|---|------------|-------------|
| To A. L. Brooks & Co., for sawdust..... | \$ 30 | |
| Howes & Burnham, for lumber..... | 17 17 | |
| M. C. Pratt & Co., for lumber and labor | 68 47 | |
| H. Whitney & Co., for lumber..... | 268 82 | |
| Whitney & Tibbetts, for lumber..... | 830 38 | |
| Fred W. Bennett, for sand..... | 66 50 | |
| L. J. Stiaistney, for sand..... | 28 25 | |
| Shepard Wood, for sand..... | 17 10 | |
| Willard Coburn, for gravel..... | 67 60 | |
| L. Kittredge & Son, for gravel..... | 227 00 | |
| Charles W. Kimball, for gravel..... | 7 00 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$1,598 59 | \$58,010 40 |

Amounts brought forward..... \$1,598 59 \$58,010 40

Paid for LUMBER, STONE, BRICK,
CONCRETE; ETC.:

| | | |
|--|-----------|-----------|
| To George F. Morey, for gravel..... | 13 00 | |
| Joseph W. Smith, for gravel..... | 33 40 | |
| D. S. Wood, for gravel..... | 37 40 | |
| Wm. E. Livingston, for brick..... | 42 27 | |
| Henry Boyle, for lime..... | 3 30 | |
| Thomas M. King, for stone eapping.... | 152 18 | |
| Middleburg Blue Stone Co., for bridge stone and flagging..... | 417 52 | |
| Pigeon Hill Granite Co., for paving stone | 13,316 33 | |
| Noah Preseott, for edgestone..... | 43 62 | |
| David Reed, for flagging, edgestone, and bound stone..... | 1,207 89 | |
| E. A. & A. T. Smith, for paving stone. | 5,892 33 | |
| Solomon Spalding, for flagging and edge- stone | 2,566 53 | |
| Sweatt & Davis, for stone..... | 196 43 | |
| Robert Gardner, for paving stone and labor..... | 592 78 | |
| E. A. & A. T. Smith, for concrete..... | 3,204 95 | |
| S. B. Tallant & Co., for conerete..... | 908 45 | |
| Boston & Lowell Railroad, for transport- ation | 3 01 | |
| Nashua & Lowell Railroad, for transport- ation | 738 64 | |
| | <hr/> | 30,968 62 |

Paid for IRON, STEEL, REPAIR-
ING HARNESES, CARRIAGES,
HARDWARE, TOOLS, ETC.:

| | | |
|--|----------|-------------|
| To R. H. Boutwell & Co., for iron..... | \$ 23 32 | |
| A. W. Butcher, for iron and steel..... | 153 77 | |
| Cole & Nichols, for eastings..... | 8 30 | |
| Dodge, Gilbert & Co., for iron and nails. | 79 25 | |
| Houdlette & Ellis, Lessees, for iron and steel..... | 79 30 | |
| Pevey Bros., for castings..... | 15 60 | |
| Charles E. Adams, for hardware, tools, etc | 343 07 | |
| John C. Bennett, for hardware, and tools, | 24 35 | |
| Sager Ashworth & Co., for files, rasps and labor..... | 22 60 | |
| H. A. Fielding, for hardware and tools.. | 42 20 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$791 76 | \$88,979 02 |

Amounts brought forward..... \$791 76 \$88,979 02

Paid for IRON, STEEL, REPAIR-
ING HARNESSSES, CARRIAGES,
HARDWARE, TOOLS, ETC.:

| | | |
|---|--------|----------|
| To W. D. Harriman, for picks, etc..... | 16 50 | |
| Rogers, Taylor & Co., for hardware and tools | 20 37 | |
| H. B. Shattuck, for hardware and tools, | 19 39 | |
| Frederick Taylor, for hardware and tools, | 65 82 | |
| Archibald Wheel Co., for wheels and axles..... | 426 60 | |
| Henry J. Draper, for painting wagon... | 15 00 | |
| C. W. Bisbee, for repairing carriage.... | 50 | |
| Griffin & Lake, for sled rolls, whiffletree, etc | 3 70 | |
| A. Parsons, for repairing cart, etc..... | 2 35 | |
| William Robinson, for wheels and axles, | 11 27 | |
| G. F. Hill, for spokes..... | 2 00 | |
| C. A. Ross & Co., for sleigh, buggy, and repairing carriages..... | 246 75 | |
| Frank P. Hill & Co., for bolts, rivets, etc | 3 19 | |
| Henry N. Stone, for repairing street sweeper..... | 14 00 | |
| John B. Palmer, for pick and hammer handles | 52 97 | |
| Warren Wadleigh, for pick and hammer handles | 14 83 | |
| J. A. Brabrook, for repairing harnesses whip and baskets..... | 45 03 | |
| T. M. Bolton & Co., for horse cover, re- pairing harnesses, etc..... | 228 00 | |
| S. L. Butman, for harness, and repairing harnesses | 217 39 | |
| Sawyer & Taylor, for collar, straps, bas- kets, and repairing harnesses..... | 137 32 | |
| M. Meaney, for horse covers..... | 14 00 | |
| Boston & Lowell Railroad, for trans- portation..... | 5 53 | |
| Boston & Maine Railroad, for trans- portation..... | 3 92 | |
| | | 2,358 19 |

Paid for LAND, ETC.:

| | |
|--|---------|
| To Alvin Beard, for land taken to widen Pine street (1877)..... | \$40 00 |
|--|---------|

Amounts carried forward..... \$40 00 \$91,337 21

Amounts brought forward..... \$40 00 \$91,337 21

Paid for LAND, ETC. :

| | | |
|---|----------|----------|
| To Eli B. Carleton, for land taken to widen Pine street (1877)..... | 20 75 | |
| Francis Carll, for land taken to widen Pine street (1877)..... | 4 15 | |
| A. Parsons, for land taken to widen Pine street (1877)..... | 24 45 | |
| Frank Coburn, Agent, for damage caused by grading Bowers street.... | 10 00 | |
| Lowell Bleachery, for land taken in laying out Livingston street..... | 627 70 | |
| Albert G. Swan, for damage awarded for removing house..... | 200 00 | |
| Albert G. Swan, Agent, for land taken to widen Gorham street..... | 283 50 | |
| Charles and Dorcas Osgood, for land taken to widen Gorham street..... | 127 17 | |
| Mollahan Bros., for land taken to widen Agawam street..... | 54 00 | |
| John F. Manahan, for land taken to widen Grove street (1877)..... | 1,683 20 | |
| | | 3,074 92 |

Paid for SUNDRIES :

| | | |
|---|----------|-------------|
| To Appropriation for Sewers and Drains, for brick, labor, and sewer assessment... | \$236 32 | |
| Appropriation for Lighting, for coal oil. | 11 17 | |
| Appropriation for Water Works, for use of water | 74 17 | |
| Boston Daily Advertiser, for advertising | 19 25 | |
| Leonard Brown & Co., for printing..... | 4 00 | |
| Bachelor, Dumas & Co., for blank books | 1 87 | |
| E. Burgess, for envelopes..... | 75 | |
| F. P. Coggeshall & Son, for blank books and stationery..... | 3 30 | |
| F. P. Coggeshall, for blank book, etc... | 4 05 | |
| C. L. Knapp & Son, for advertising.... | 8 00 | |
| Marden & Rowell, for advertising..... | 8 00 | |
| Morning Times for advertising | 10 25 | |
| Joshua Merrill & Son, for blank books and stationery..... | 6 60 | |
| Abel Whitney, for blank books and stationery..... | 4 94 | |
| T. Costello & Co., for pipe, water fixtures, solder, labor, etc..... | 41 50 | |
| <i>Amounts carried forward</i> | \$434 17 | \$94,412 13 |

Amounts brought forward..... \$434 17 \$94,412 13

Paid for SUNDRIES :

| | |
|---|--------|
| To S. G. Mack & Co., for pipe, copper, pails, labor, etc..... | 11 15 |
| H. H. Wilder & Co., for pail, can and dipper | 1 13 |
| Carey & Harris, for labor on rods..... | 90 |
| Ariston Grover, for steel stamps and branding irons..... | 4 50 |
| J. H. Haskell, for saw frame, keys, and filing saws..... | 36 18 |
| C. T. Haskell, for filing saws..... | 4 36 |
| John A. Knowles, Jr., for repairing scale | 5 25 |
| J. W. Trumbull, for filing saw..... | 55 |
| Griffin & Lake, for rolls, ladder rounds, etc | 10 25 |
| George Allen, for baskets, and repairing baskets | 2 50 |
| Daniel A. Brown, for material for brooms | 3 50 |
| Edwin W. Brown, for brooms..... | 14 00 |
| Abbott & Dickinson, for cloth and labor | 1 95 |
| J. P. Folsom, for crash..... | 1 00 |
| Buttrick & Co., for sulphur, salts, etc.. | 2 96 |
| C. F. Blanchard, for liniment..... | 4 00 |
| F. H. Chandler, for mineral salt and oat- meal..... | 21 23 |
| J. B. Cover & Co., for oat-meal..... | 64 |
| Fuller, Clark & Fuller, for oatmeal..... | 3 18 |
| Greenwood Bros., for oatmeal and brim- stone | 4 99 |
| Gibson Bros., for oatmeal..... | 80 |
| J. R. Hayes, for medicine for horses... | 45 78 |
| I. K. Goodale, for oatmeal..... | 40 |
| H. G. Holden, for dualin and electric fuse | 81 50 |
| R. C. Lord, for oatmeal..... | 80 |
| John McCluskey, for oatmeal..... | 2 80 |
| M. Murphy, for oatmeal and wicks..... | 5 70 |
| Nichols & Fletcher, for dualin, powder, fuse, and oatmeal..... | 175 23 |
| A. P. Noyes, for castile soap and oil... | 31 10 |
| Fred H. Parker, for oatmeal..... | 1 05 |
| R. K. Runals, for oatmeal and liniment. | 38 89 |
| J. B. Richardson, for oatmeal..... | 14 50 |
| Stickney & Spofford, for oatmeal..... | 1 20 |
| Darius Whithed, for oatmeal and oil.... | 6 06 |

Amounts carried forward..... \$974 20 \$94,412 13

Amounts brought forward..... \$974 20 \$94,412 13

Paid for SUNDRIES :

| | | |
|---|----------|--|
| To J. P. Scollay, for polish and harness dressings..... | 12 50 | |
| Worthen & Coburn, for oatmeal..... | 3 20 | |
| C. B. Coburn & Co., for oil, spirits turpentine, chalk, wicks, twine, rope, blocks, lanterns, brushes, baskets, etc | 106 88 | |
| Fiske & Spalding, for paper, pencils, rubber, and labor..... | 9 33 | |
| Josiah Gates & Sons, for hose, washers and leather | 19 95 | |
| Wm. E. Livingston, for lime and cement | 8 40 | |
| Henry Boyle, for whitewashing..... | 32 50 | |
| S. H. Lee, for labor..... | 11 00 | |
| G. S. Butters, for horses, difference between horses exchanged and use of horses | 1,399 50 | |
| George L. Huntoon, for use of horses and carriages | 10 00 | |
| Thomas Mooney, for use of horse and cart | 47 85 | |
| M. Maguire, for labor..... | 5 20 | |
| Stephen P. Sargent, for privilege of crossing his land with gravel..... | 1 78 | |
| W. P. Foye, for damage to house by blasting..... | 15 00 | |
| Jesse A. Viles, for treatment of horses.. | 5 00 | |
| Robert Wood, for treatment of horses... | 40 00 | |
| George E. Evans, for cash paid for repairing tape and rod, postage, travelling expenses, etc | 10 18 | |
| John C. Woodward, for cash paid for postage, travelling expenses, etc..... | 11 40 | |
| Lowell Gas Light Co., for gas..... | 138 70 | |
| G. C. Bassett, for services as referee... | 5 00 | |
| George B. Farnham, for services as referee | 5 00 | |
| Charles D. Starbird, for services as referee | 5 00 | |
| Lovejoy & Co.'s Express, for transportation..... | 25 | |
| Boston & Lowell Railroad Co., on account of construction of R. R. Bridge over Gorham street | 6,000 00 | |

Amounts carried forward..... \$8,877 82 \$94,412 13

Amounts brought forward..... \$8,877 82 \$94,412 13

Paid for SUNDRIES :

| | | |
|--|-------|----------|
| To Penniman & Co.'s Express, for transportation..... | 1 70 | |
| | <hr/> | 8,879 52 |

| | |
|--------------------------------------|--------------|
| *Whole expenditure for the year..... | \$103,291 65 |
|--------------------------------------|--------------|

| | |
|--------------------------------------|--------|
| Balance undrawn January 1, 1880..... | 111 67 |
|--------------------------------------|--------|

| | | |
|--|-------|--------------|
| | <hr/> | \$103,403 32 |
| | <hr/> | |

*From this deduct:

Amount received for sidewalks, fuel, labor, material, etc.....\$22,116 57

Amount paid for land and buildings taken in laying out, widening and extending streets..... 3,074 92

| | | |
|--|-------|-------------|
| | <hr/> | \$25,191 49 |
|--|-------|-------------|

Making the net expenditure for ordinary street purposes.....

| | | |
|--|-------|-------------|
| | <hr/> | \$78,100 16 |
|--|-------|-------------|

RESERVED FUND.

| | | |
|--------------------------------------|------------|------------|
| Balance undrawn January 1, 1879..... | \$7,669 52 | |
| | \$7,669 52 | \$7,669 52 |

RECEIPTS.

Received into the TREASURY :

| | | |
|--|--------------------|-------------------|
| From Sundry persons, for use of Huntington Hall | \$1,740 00 | |
| Sundry persons, for use of Jackson Hall | 85 00 | |
| Commonwealth, for rent of armories... | 1,133 33 | |
| County of Middlesex, for rent of Police Court rooms..... | 750 00 | |
| Carleton & Hovey, for rent of store in City Hall Building..... | 1,200 00 | |
| Alfred Gilman & Son, for rent of store in City Hall Building..... | 675 00 | |
| William Bascom, for rent of store in City Hall Building..... | 900 00 | |
| Percia L. Dyar, for rent of store in City Hall Building..... | 950 00 | |
| Helen J. Bartlett, for rent of store in City Hall Building..... | 150 00 | |
| C. P. Talbot & Co., for rent of store and cellar in Market House Building | 1,200 00 | |
| John H. McAlvin, City Treasurer, for liquor licenses..... | 25,878 75 | |
| Samuel A. McPhetres, City Clerk, for marriage certificates | 309 50 | |
| Samuel A. McPhetres, City Clerk, for recording mortgages, assignments, etc | 639 15 | |
| Samuel A. McPhetres, City Clerk, for recording dog licenses..... | 220 20 | |
| <i>Amounts carried forward.....</i> | <i>\$35,830 93</i> | <i>\$7,669 52</i> |

Amounts brought forward..... \$35,830 93 \$7,669 52

Received into the TREASURY :

| | |
|---|--------|
| From Samuel A. McPhetres, City Clerk, for recording liquor licenses..... | 336 00 |
| Samuel A. McPhetres, City Clerk, for sundry licenses, etc..... | 956 57 |
| ✓ Sidney Davis, Superintendent of City Scales, for fees for weighing..... | 74 48 |
| ✓ Sidney Davis, Measurer of Wood and Bark, for fees for measuring..... | 45 40 |
| Allen P. Lake, Superintendent of City Scales, for fees for weighing..... | 649 65 |
| Allen P. Lake, Measurer of Wood and Bark, for fees for measuring..... | 340 10 |
| Bernard Riley, on account of fees for weighing, from April 1, 1875 to July 1, 1877..... | 124 18 |
| James Murphy, for fees for sealing weights and measures..... | 225 04 |
| Appropriation for Schools, for fuel and labor..... | 278 04 |
| Appropriation for Police, for fuel and labor..... | 53 53 |
| Appropriation for Fire Department, for fuel and labor..... | 75 36 |
| Appropriation for Repairs of Public Buildings, for fuel..... | 14 21 |
| Sundry persons, for cost of preparing their estates for sale for non-payment of taxes of 1878..... | 106 10 |
| Thomas Wilson, for cost of preparing his estate for sale for non-payment of sewer assessment..... | 3 10 |
| Sundry persons, for cost of preparing their estates for sale for non-payment of sidewalk assessments..... | 13 80 |
| The following persons, over and above the taxes and costs on their estates, sold for non-payment of taxes of 1878, viz. : | |
| Seth Glidden (by Geo. S. Cheney)... | 64 00 |
| Stewart H. Burleigh (by M. G. Perkins) | 4 00 |
| ✓ Edward Moody (by M. G. Perkins)... | 4 00 |
| Jonathan Bowers (by John G. Rogers) | 1 48 |
| Michael G. Shea (by J. W. Bennett). | 26 00 |

Amounts carried forward..... \$39,225 97 \$7,669 52

Amounts brought forward..... \$39,225 97 \$7,669 52

Received into the TREASURY:

| | | |
|---|-------|--------------------|
| From A. Stevens (by J. W. Bennett)..... | 33 00 | |
| Mary Hogan (by Geo. W. Norris)... | 8 00 | |
| John Cain (by Geo. W. Norris)..... | 10 00 | |
| William W. Russell (by Geo. W. Norris)..... | 25 00 | |
| | <hr/> | 39,301 97 |
| | | <hr/> |
| | | <u>\$46,971 49</u> |

EXPENDITURES.

Paid MEASURER OF WOOD AND
BARK AND SUPERINTENDENT
OF CITY SCALES:

| | | |
|---|---------|----------|
| To Sydney Davis, Measurer, salary..... | \$ 5 00 | |
| Sydney Davis, Superintendent, salary.. | 1 25 | |
| Allen P. Lake, Measurer, salary..... | 595 00 | |
| Allen P. Lake, Superintendent, salary.. | 111 25 | |
| | <hr/> | \$712 50 |

MEMORIAL DAY.

| | | |
|--|----------|--------|
| To Post 42, Grand Army of the Republic, per resolution..... | \$300 00 | |
| | <hr/> | 300 00 |

Paid for CELEBRATION OF THE ONE
HUNDRED AND THIRD ANNI-
VERSARY OF AMERICAN INDE-
PENDENCE:

| | | |
|---|----------|------------|
| To American Brass Band, for services..... | \$140 00 | |
| Berry's Band, for services..... | 120 00 | |
| Dunstable Cornet Band, for services.... | 100 00 | |
| Lowell Cornet Band, for services,..... | 120 00 | |
| Grand Army Drum Corps, for services.. | 25 00 | |
| S. P. Driver, for services at Huntington Hall..... | 10 00 | |
| American House, for collation..... | 125 00 | |
| Frank E. Shaw, for collation..... | 48 60 | |
| Lowell Mechanic Phalanx, for firing sa- lutes..... | 150 00 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$838 60 | \$1,012 50 |

| | | |
|--|------------|------------|
| <i>Amounts brought forward</i> | 838 60 | \$1,012 50 |
| Paid for CELEBRATION OF THE ONE HUNDRED AND THIRD ANNI- VERSARY OF AMERICAN INDE- PENDENCE: | | |
| To George W. Townsend, for sub-marine exhibition | 150 00 | |
| Hyde & Co., for display of fireworks... | 400 00 | |
| G. Nelson Beals, for decorations..... | 100 00 | |
| J. P. Folsom, for bunting..... | 6 74 | |
| H. Hosford & Co., for cashmere and silk | 34 80 | |
| F. E. Marsh, for ribbon, rosettes, etc... | 19 74 | |
| Sarah A. Towle, for making badges,... | 7 00 | |
| J. S. Jones, for chapeaus..... | 9 00 | |
| A. W. Matthews, for sash, ribbon, and labor | 2 81 | |
| D. W. O'Brien, for leggins..... | 38 25 | |
| Otis Allen & Son, for batons..... | 2 60 | |
| A. Kittredge, for gilding batons..... | 2 50 | |
| C. H. McEvoy, for labor on batons..... | 50 | |
| Leonard Brown, for printing..... | 2 00 | |
| Leonard Brown & Co., for printing | 1 75 | |
| Harrington Bros., for printing and ad- vertising | 32 00 | |
| Huse, Goodwin & Co., for printing and advertising | 18 00 | |
| C. L. Knapp & Son, for printing and ad- vertising | 60 75 | |
| La Sentinelle, for advertising..... | 12 00 | |
| Lowell Morning Times, for printing and advertising | 50 00 | |
| Marden & Rowell, for printing and ad- vertising | 44 75 | |
| Stone, Bacheller & Livingston, for print- ing and advertising | 29 25 | |
| W. S. Simons, for posting..... | 26 50 | |
| B. S. Freeman, for distributing notices.. | 2 00 | |
| Chase, Sargent & Sons, for postage stamps..... | 5 07 | |
| Walter Coburn, for cash paid for express- ing | 2 00 | |
| C. A. R. Dimon, for cash paid for post- age, expressing, etc..... | 9 50 | |
| H. C. Church, for stationery, etc..... | 3 93 | |
| Andrew Adams, for ringing bell..... | 5 00 | |
| William McArthur, for ringing bells.... | 7 00 | |
| <i>Amounts carried forward</i> | \$1,924 04 | \$1,012 50 |

Amounts brought forward..... \$1,924 04 \$1,012 50

Paid for CELEBRATION OF THE ONE
HUNDRED AND THIRD ANNI-
VERSARY OF AMERICAN INDE-
PENDENCE :

| | | |
|---|--------|------------|
| To Frank L. Morey, for ringing bell..... | 2 00 | |
| Morris Quinn, for ringing bell..... | 2 50 | |
| G. F. Scribner & A. E. Nichols, for ringing bell..... | 2 00 | |
| H. W. Tinker, for ringing bell..... | 2 50 | |
| L. C. Dodge, for use of canvass..... | 3 00 | |
| G. A. McEvoy, for services as clerk of Chief Marshal, and postage..... | 36 57 | |
| J. Tyler Stevens, for office rent..... | 5 00 | |
| Lowell Gas Light Co., for gas..... | 74 | |
| Jules H. Mayo, for labor..... | 1 50 | |
| W. L. Floyd, for labor..... | 75 | |
| C. F. Howe, for cash paid for carriage hire, etc..... | 8 00 | |
| Town of Pelham, for prize awarded for best town team..... | 25 00 | |
| H. B. & H. M. Bacon, for ice tilter and field glass (prizes at regatta)..... | 35 00 | |
| J. A. G. Richardson, for amount of cash prizes awarded at regatta..... | 210 00 | |
| E. L. Williams, for services putting out buoys, etc..... | 10 00 | |
| Edward Lambert, for services at regatta. | 25 00 | |
| G. H. Sheldon, for use of steamer..... | 10 00 | |
| Vesper Boat Club, for use of buoys and weights | 5 00 | |
| W. H. Worcester & Co., for use of time watch..... | 1 00 | |
| W. Calderwood, for cigars..... | 6 00 | |
| E. W. Hall, for lemons..... | 4 10 | |
| Nichols & Hutchins, for lemonade..... | 5 00 | |
| J. & J. M. Pearson, for sugar..... | 3 60 | |
| Daniel Stewart, for making lemonade... | 4 50 | |
| Geo. L. Huntoon, for carriages..... | 181 00 | |
| H. J. Keyes, for carriages..... | 19 00 | |
| H. O. Morse, for carriages..... | 13 00 | |
| C. H. Hanson, for carriages..... | 12 00 | |
| A. E. Conant, for teaming..... | 50 | |
| Timothy Kelley, for teaming..... | 75 | |
| Daniel McCarty, for teaming..... | 6 00 | |
| | | 2,565 05 |
| <i>Amount carried forward</i> | | \$3,577 55 |

RESERVED FUND.

61

Amount brought forward..... \$3,577 55

Paid for SERVICES OF WARD OFFICERS :

WARD ONE.

| | | |
|------------------------------------|---------|-------|
| To William Hart, Warden..... | \$10 00 | |
| Timothy H. Brennan, Clerk..... | 10 00 | |
| Philip T. Bagley, Inspector..... | 6 00 | |
| George B. Goodale, Inspector..... | 6 00 | |
| Jeremiah J. Hayes, Inspector..... | 6 00 | |
| George A. Scribner, Inspector..... | 6 00 | |
| John B. Smith, Inspector..... | 6 00 | |
| James D. Sullivan, Inspector..... | 6 00 | |
| | <hr/> | 56 00 |

WARD TWO.

| | | |
|--------------------------------------|---------|-------|
| To William F. Courtney, Warden..... | \$ 5 00 | |
| James McCluskey, Warden..... | 5 00 | |
| Abner L. Kittredge, Clerk..... | 10 00 | |
| John C. Callahan, Inspector..... | 6 00 | |
| Orrin C. Carleton, Inspector..... | 6 00 | |
| Stephen J. Kirby, Inspector..... | 3 00 | |
| Henry J. McAlvin, Inspector..... | 6 00 | |
| James F. Puffer, Jr., Inspector..... | 6 00 | |
| George A. Saunders, Inspector..... | 6 00 | |
| Earl A. Thissell, Inspector..... | 3 00 | |
| | <hr/> | 56 00 |

WARD THREE.

| | | |
|------------------------------------|---------|-------|
| To James Howard, Warden..... | \$10 00 | |
| Charles J. Heeran, Clerk..... | 10 00 | |
| John H. Cassidy, Inspector..... | 6 00 | |
| Daniel Crane, Inspector..... | 3 00 | |
| Harry Dunlap, Inspector..... | 6 00 | |
| Horace Ela, Inspector..... | 6 00 | |
| Joseph Jennings, Inspector..... | 6 00 | |
| John H. Keenan, Inspector..... | 3 00 | |
| Michael F. Maguire, Inspector..... | 6 00 | |
| | <hr/> | 56 00 |

WARD FOUR.

| | | |
|--------------------------------------|---------|------------|
| To David Lane, Warden..... | \$10 00 | |
| Charles E. Carter, Clerk..... | 10 00 | |
| W. H. Blaney, Inspector,..... | 6 00 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$26 00 | \$3,745 55 |

| | | |
|-------------------------------------|---------|------------|
| <i>Amounts brought forward.....</i> | \$26 00 | \$3,745 55 |
|-------------------------------------|---------|------------|

Paid for Services of WARD OFFICERS:

WARD FOUR.

| | | |
|------------------------------------|-------|-------|
| To W. A. Dickinson, Inspector..... | 6 00 | |
| M. J. Fletcher, Inspector..... | 6 00 | |
| I. K. Goodale, Inspector | 6 00 | |
| J. Franklin Harvey, Inspector..... | 6 00 | |
| Charles F. Manahan, Inspector..... | 6 00 | |
| | <hr/> | 56 00 |

WARD FIVE.

| | | |
|-----------------------------------|---------|-------|
| To Ward S. Dudley, Warden..... | \$10 00 | |
| George E. Worthen, Clerk..... | 10 00 | |
| George L. Fowler, Inspector..... | 6 00 | |
| Samuel Hosmer, Inspector..... | 6 00 | |
| Edward B. Peirce, Inspector..... | 6 00 | |
| James A. Peirce, Inspector,..... | 3 00 | |
| Robert J. Thomas, Inspector..... | 6 00 | |
| H. Arthur Webster, Inspector..... | 6 00 | |
| Frank T. Whitney, Inspector..... | 3 00 | |
| | <hr/> | 56 00 |

WARD SIX.

| | | |
|------------------------------------|---------|-------|
| To Henry Emery, Warden..... | \$10 00 | |
| Edward A. Coffin, Clerk..... | 10 00 | |
| Thomas J. Day, Inspector..... | 6 00 | |
| John Doyle, Inspector..... | 6 00 | |
| Robert J. Shepard, Inspector..... | 6 00 | |
| Edward W. Thompson, Inspector..... | 6 00 | |
| Rinaldo H. Tyler, Inspector..... | 6 00 | |
| Joseph B. Varnum, Inspector..... | 6 00 | |
| | <hr/> | 56 00 |

Paid for FUEL:

| | | |
|--|----------|----------|
| To Appropriation for Roads and Bridges, for fuel and labor..... | \$291 12 | |
| Whithed & Co. for coal..... | 823 88 | |
| | <hr/> | 1,115 00 |

Paid for DAMAGES:

| | | |
|---|----------|------------|
| To R. S. Clifford, for damage to goods..... | \$ 10 00 | |
| Henry G. Cushing, for damage to horse, sleigh and harness..... | 200 00 | |
| | <hr/> | |
| <i>Amounts carried forward.....</i> | \$210 00 | \$5,028 55 |

Amounts brought forward..... \$210 00 \$5,028 55

✓ Paid for DAMAGES :

| | | |
|---|----------|----------|
| Maria F. Mc Curdy, for personal injuries | 200 00 | |
| Ellen Brennan, for personal injuries.... | 200 00 | |
| Patrick McCullough, for personal injuries | 350 00 | |
| David J. Cheney, on execution..... | 1,634 32 | |
| | <hr/> | 2,594 32 |

BURIAL GROUNDS.

Paid for SUNDRIES :

| | | |
|--|---------|--------|
| To Appropriation for Roads and Bridges, for labor..... | \$ 7 50 | |
| Moses Churchill, for labor..... | 375 00 | |
| Charles T. Washburn, for labor..... | 7 00 | |
| A. G. Swan, for labor with team..... | 53 50 | |
| Charles E. Adams, for hardware and tools..... | 12 27 | |
| T. H. Curtis, for repairing locks..... | 2 00 | |
| George H. Jacobs, for hitching bars.... | 8 50 | |
| F. Calvert, for repairing lawn mower... | 2 25 | |
| Howes & Burnham, for lumber..... | 9 02 | |
| M. C. Pratt & Co., for lumber and labor | 19 73 | |
| | <hr/> | 496 77 |

Paid for SUNDRIES :

| | | |
|--|------------|------------|
| To Appropriation for Schools, for mats, brooms, mops, pails, etc..... | \$ 16 77 | |
| Appropriation for Roads and Bridges, for services of City Engineer..... | 51 87 | |
| Appropriation for Roads and Bridges, for labor..... | 41 87 | |
| Appropriation for Repairs of Public Buildings, for lumber, labor, etc..... | 125 29 | |
| Appropriation for Water Works, for use of water..... | 829 00 | |
| Appropriation for Police, for services of J. F. McCaffrey, assisting City Solicitor..... | 82 50 | |
| Henry J. McAlvin, for services in City Treasurer's office | 588 00 | |
| W. G. Eaton, Jr., for services in City Treasurer's office | 3 00 | |
| Guy Morey, for services in City Treasurer's office..... | 169 53 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$1,907 83 | \$8,119 64 |

Amounts brought forward..... \$1,907 83 \$8,119 64

Paid for SUNDRIES :

| | |
|---|--------|
| To Frank R. Rix, for services in City Treasurer's office..... | 6 00 |
| Frank W. Searle, for services in City Clerk's office..... | 626 00 |
| Helen J. Morrill, for services in City Clerk's office..... | 182 51 |
| Guy Morey, for services in City Clerk's office..... | 25 50 |
| Helen S. Durgin, for services in City Clerk's office..... | 30 00 |
| Guy Morey, for services in Auditor's office..... | 138 00 |
| Edward Barrows, for services in Assessors' office..... | 41 00 |
| W. G. Eaton, Jr., for services in Assessors' office..... | 199 50 |
| Frank R. Rix, for services in Assessors' office | 390 25 |
| George H. W. Whiteside, for services in Assessors' office..... | 136 00 |
| John F. Burrill, for services in City Library | 420 00 |
| W. H. Gilman, for services in City Library | 510 00 |
| Stephen T. Wyman, for services in City Library | 80 00 |
| C. W. Hanson, for services as clerk of the Committee on Military Affairs.... | 534 00 |
| George F. Lawton, for services as clerk of the Committee on Revision of Ordinances etc..... | 33 00 |
| W. F. Chapman, for services at registration of voters..... | 9 00 |
| J. W. Nash, for services at registration of voters..... | 11 00 |
| Samuel G. Cressey, for ascertaining the number of births in Ward Six, in 1878..... | 19 10 |
| David Lane, for ascertaining the number of births in Wards Three and Four, in 1878..... | 40 50 |
| William W. Read, for ascertaining the number of births in Wards One and Two, in 1878..... | 42 40 |

Amounts carried forward..... \$5,381 59 \$8,119 64

Amounts brought forward..... \$5,381 59 \$8,119 64

Paid for SUNDRIES :

| | | | |
|---|----|-------|----|
| To Levi B. Stevens, for ascertaining the number of births in Ward Five, in 1878..... | \$ | 20 | 70 |
| John F. Cosgrove, for services as janitor of Huntington Hall, and cash paid for labor, etc..... | | 1,021 | 40 |
| Clarence W. Fletcher, for services as janitor of Huntington Hall..... | | 32 | 50 |
| Clarence W. Fletcher, for services as fireman at City Hall Building..... | | 779 | 25 |
| John McAleer, for services as fireman at City Hall Building..... | | 96 | 75 |
| Henry Boynton, for services as janitor of Ward-room..... | | 15 | 00 |
| H. J. Foster, for services as janitor of Ward-room..... | | 15 | 00 |
| C. A. Lord, for services as janitor of Ward-room..... | | 9 | 00 |
| Andrew Maguire, for services as janitor of Ward-room | | 17 | 00 |
| Aaron Scadding, for services as janitor of Ward-room | | 46 | 00 |
| Wyatt Stevens, for services as janitor of Ward-room..... | | 3 | 00 |
| W. M. Stevens, for services as janitor of Ward-room..... | | 11 | 00 |
| Thomas Fee, Jr., for services on tax warrants | | 6 | 00 |
| Solomon Sanborn, for services and testimony in case of Margaret Murphy vs. City..... | | 25 | 00 |
| Benjamin F. Bayley et al., for serving notices on Wyman Heirs..... | | 4 | 68 |
| William Bass, for expert testimony in cases of Cheney and Hussey vs. City.. | | 100 | 00 |
| Walter Burnham, for expert testimony in cases of Cheney and Hussey vs. City.. | | 100 | 00 |
| Paul Hill, for expert testimony in case of Murphy vs. City..... | | 20 | 00 |
| Gilman Kimball, for expert testimony in cases of Murphy and Cheney vs. City.. | | 100 | 00 |
| Clerk of Courts, Middlesex County, for copy of record in case of Ranlett vs. City..... | | 50 | |

Amounts carried forward..... \$7,804 37 \$8,119 64

Amounts brought forward..... \$7,804 37 \$8,119 64

Paid for SUNDRIES :

| | | |
|---|--------|--|
| To William H. Ward, for witness fees in case of Murphy vs. City..... | 6 00 | |
| John F. McCaffrey, for cash paid witness fees in sundry cases, travelling expenses, and services in assisting City Solicitor..... | 280 27 | |
| Francis Goward, for cash paid for services of interpreter and postage..... | 5 00 | |
| Henry J. McAlvin, for cash paid for ink, pens, etc. used at election..... | 19 | |
| John H. Mc Alvin, for cash paid for postage stamps, rent of P. O. Box, recording deeds, hand stamp, express, etc..... | 145 02 | |
| Samuel A. McPhetres, for cash paid for postage stamps, pens, expressing, telegrams, etc..... | 34 78 | |
| John H. Nichols, for cash paid for postage stamps, rent of P. O. Box, and labor..... | 72 60 | |
| A. P. Lake, for cash paid for stationery, etc..... | 2 75 | |
| David Chase, for cash paid for postage, pens, repairing stamp, ribbon, etc.... | 22 00 | |
| J. A. G. Richardson, for cash paid for expenses of committees, entertainment of visiting firemen, telegrams, etc..... | 115 20 | |
| C. W. Hanson, for cash paid for express, postage, travelling expenses, etc..... | 7 48 | |
| J. E. Short, for railroad tickets..... | 11 25 | |
| L. G. Howe, for cash paid for labor.... | 1 30 | |
| Owen W. Cox, for office rent, etc..... | 18 00 | |
| Joseph H. Dallagher, for office rent.... | 9 00 | |
| George Hedrick, for taking care of clock on High street church, one year to January 1, 1880..... | 50 00 | |
| Mathias Hutchins, for watering streets.. | 21 50 | |
| Bachelor, Dumas & Co. for blank books etc..... | 349 23 | |
| Leonard Brown, for postal cards and printing..... | 11 75 | |
| Leonard Brown & Co., for postal cards and printing..... | 6 00 | |

Amounts carried forward \$8,973 69 \$8,119 64

Amounts brought forward..... \$8,973 69 \$8,119 64

Paid for SUNDRIES :

| | |
|--|--------|
| To Huse, Goodwin & Co., for blank books and printing..... | 165 05 |
| C. L. Knapp & Son, for two copies of Daily Citizen..... | 10 00 |
| Lowell Daily Courier, for two copies of Daily Courier..... | 12 00 |
| Stone, Bacheller & Livingston, for blank books and printing..... | 11 50 |
| J. Q. Bradish, for pens..... | 3 75 |
| Ebenezer Burgess for paper..... | 1 25 |
| H. C. Church, for stationery, etc..... | 50 54 |
| F. P. Coggeshall & Son, for blank books, stationery, etc..... | 104 18 |
| F. P. Coggeshall, for blank books, stationery, etc..... | 33 85 |
| F. S. Coolidge, for difference in Encyclopædias exchanged..... | 20 00 |
| G. M. Hopkins, for ten copies, "Atlas of Lowell."..... | 120 00 |
| J. Merrill & Son, for forty copies, Lowell Directory..... | 80 00 |
| J. Merrill & Son, for blank books, stationery, etc..... | 115 85 |
| Dye's Government Counterfeit Detector, for one copy, one year..... | 3 00 |
| N. C. Sanborn, for photographs of Green School House and plans of Huntington Hall | 17 00 |
| Walter A. Smith, for one copy, Spalding English Laws and Forms..... | 3 75 |
| Sampson, Davenport & Co., for one Boston Directory..... | 5 00 |
| C. B. Coburn & Co., for oil, packing, waste, rope, blocks, cord, twine, baskets, brushes, etc..... | 27 04 |
| Carleton & Hovey, for chloride lime, sponge, soap, brushes, combs, etc.... | 10 72 |
| Fiske & Spalding, for picture cord, hooks, and labor..... | 2 44 |
| French & Puffer, for vases, tub, and spittoons..... | 7 25 |
| Charles Gould & Co., for soap..... | 21 50 |
| Daniel Gage, for ice..... | 12 00 |
| M. Meaney, for cotton duck..... | 7 00 |

Amounts carried forward..... \$9,818 36 \$8,119 64

Amounts brought forward..... \$9,818 36 \$8,119 64

Paid for SUNDRIES :

| | |
|---|--------|
| To Nichols & Fletcher, for mats and brush. | 2 78 |
| Jacob Nichols, for tub..... | 50 |
| Benjamin Patch, for soap..... | 1 00 |
| C. P. Talbot & Co., for soda ash..... | 78 |
| J. V. Keyes, for towels..... | 1 50 |
| Robert Bird, for reseating chairs..... | 4 50 |
| George H. Crafts, for re-seating chairs.. | 4 00 |
| Amelia W. Taylor, for re-seating chairs. | 2 00 |
| J. E. Buerk, for dials for watch elock .. | 3 50 |
| A. L. Bogart, for amalgamating batteries and expressing..... | 30 45 |
| R. S. Clifford, for repairing elocks..... | 9 75 |
| George Thatcher, for repairing elocks... | 4 00 |
| Fairbanks, Brown & Co., for repairing seale..... | 3 75 |
| John A. Knowles, Jr., for seale..... | 25 00 |
| A. L. Kittredge, for lettering boxes and barrel..... | 4 50 |
| Charles E. Adams, for bolts and serews. | 56 |
| American Bolt Co., for bolts..... | 2 10 |
| J. W. Buteher, for bolts and washers... | 11 08 |
| Cole & Nichols, for grates, etc..... | 41 82 |
| T. Costello & Co., for hose, couplings, tunnels, and labor..... | 13 75 |
| Richard Dobbins, for castings, labor and inspecting boilers..... | 51 13 |
| T. R. Garity, for globe and labor..... | 1 95 |
| John Gilehrst, for scraper, springs, and labor..... | 6 46 |
| S. G. Maek & Co., for tin boxes, hods and labor..... | 38 70 |
| E. M. McPherson, for labor on lock.... | 7 50 |
| Horace B. Shattuck, for rule and screws | 4 62 |
| Rogers, Taylor & Co., for iron barrow and nails..... | 14 12 |
| Frederick Taylor, for hardware..... | 5 04 |
| N. J. Wier & Co., for repairing pump.. | 75 |
| Adams & Co., for earpeting, mats, furni- ture, labor, etc..... | 518 93 |
| Benner Bros., for matting and stools ... | 37 45 |
| Crosby Furniture Co., for table and dow- elling..... | 12 30 |
| Griffin & Lake, for maple rounds..... | 75 |
| Marshall, Crosby & Co., for book-ease.. | 175 00 |

Amounts carried forward..... \$10,860 38 \$8,119 64

Amounts brought forward.....\$10,860 38 \$8,119 64

Paid for SUNDRIES :

| | |
|--|--------|
| To Offutt & Whitaker, for matting, oil cloth and repairing chairs..... | 36 83 |
| James Enright, for repairing settees.... | 17 00 |
| M. J. Murray, for labor on carpet..... | 3 50 |
| Davis & Sargent, for lumber, shavings, and sawdust..... | 34 72 |
| M. C. Pratt & Co., for lumber and labor | 80 77 |
| James Meadowcroft, for repairing pump. | 6 25 |
| Lowell District Telephone Co., for con- structing line to Almshouse..... | 175 00 |
| Lowell District Telephone Co., for tele- phone service, etc..... | 63 82 |
| American Brass Band, for services at re- ception of Ancient and Honorable Artillery Co..... | 72 00 |
| S. N. Patterson, for decorating Hunting- ton and Jackson Halls..... | 140 00 |
| E. Sheppard & Sons, for floral decora- tion..... | 25 00 |
| Lowell Horse R. R. Co., for use of cars. | 8 00 |
| John E. Hadley, for carriage hire..... | 137 25 |
| H. O. Morse, for carriage hire..... | 68 50 |
| G. W. Norris, for carriage hire..... | 3 00 |
| H. J. Keyes, for carriage hire..... | 14 00 |
| Nichols & Hutchins, for refreshments... | 88 72 |
| A. A. Hanscom, for cleaning artillery... | 5 00 |
| Kate Sullivan, for cleaning at City Hall. | 108 95 |
| Brace & Lathrop, for insect powder and labor | 50 00 |
| James A. Manuel, for washing windows. | 5 40 |
| Daniel Leary, for labor..... | 3 00 |
| Daniel McCarty, for labor with team... | 4 00 |
| William Roberts, for labor with team... | 11 00 |
| Francis S. Smith, for labor with team... | 50 |
| Penniman & Co.'s Express, for transpor- tation..... | 11 30 |
| Town of Dracut, for taxes of 1879..... | 11 28 |
| Mary Hogan, for amount paid above taxes, costs and interest on her estate, sold for non-payment of taxes of 1878. | 8 00 |
| Martha E. Glidden, for amount paid above taxes, cost and interest on estate of Seth Glidden, sold for non-pay- ment of taxes of 1878..... | 64 00 |

Amounts carried forward.....\$12,117 17 \$8,119 64

Amounts brought forward.....\$12,117 17 \$8,119 64

Paid for SUNDRIES :

| | | |
|--|-------|-----------|
| A. Stevens, for amount paid above taxes, cost and interest on his estate, sold for non-payment of taxes of 1878..... | 33 00 | |
| Patrick Whalen, for labor..... | 33 75 | |
| Patrick Cummiskey, for use of Fair Grounds for Military Co..... | 20 00 | |
| Boston & Lowell Railroad Co. for ground rent of Huntington and Jackson Halls, one month to January 1, 1879..... | 39 58 | |
| Central Savings Bank, for rent of safety deposit box, one year..... | 25 00 | |
| Olive Swan, for taxable costs in case of Swan vs. City..... | 10 80 | |
| | <hr/> | 12,279 30 |

| | | |
|-------------------------------------|--|-------------------|
| Whole expenditure for the year..... | | <hr/> \$20,398 94 |
|-------------------------------------|--|-------------------|

TRANSFERS.

| | | |
|---|-------------|-------------------|
| Transferred to Appropriation for Roads and Bridges..... | \$15,000 00 | |
| Transferred to Appropriation for State Aid.. | 7,000 00 | |
| Transferred to Appropriation for Aid to Poor and Indigent Soldiers and Sailors.... | 3,000 00 | |
| | <hr/> | 25,000 00 |
| | | <hr/> \$45,398 94 |
| Balance undrawn January 1, 1880..... | | 1,572 55 |
| | | <hr/> \$46,971 49 |

PAUPERS.

| | | |
|--|-------------|-------------|
| Balance undrawn January 1, 1879..... | \$ 2,583 82 | |
| Appropriated and assessed in 1879..... | 32,000 00 | |
| | <hr/> | \$34,584 82 |

RECEIPTS.

Received into the Treasury on account of
PAUPERS :

| | | |
|---|-----------|------------------------------|
| From Appropriation for Roads and Bridges, for hay, straw and carrots..... | \$ 189 44 | |
| Appropriation for Fire Department, for hay and straw,..... | 340 96 | |
| Lorenzo Phelps, for sales from farm... | 1,890 63 | |
| Lorenzo Phelps, for board of Ann Con- nelly..... | 72 00 | |
| Commonwealth, on account of State Pan- pers | 3,313 62 | |
| Commonwealth, for burial of State Pau- pers | 560 00 | |
| City of Boston, for aid rendered Mary Murphy, Mrs. Thomas Carnes, Bridget Breen, Mrs. H. Jones, Marion Miner, Samuel Barry, Mau- rice Buckley, Joseph Jones, Wm. W. Whitcomb, Thomas Mc Der- mott, Robert Lloyd and Hamilton Stewart | 185 21 | |
| City of Chelsea, for board of boys at Reform School..... | 722 75 | |
| City of Cambridge, for aid rendered Angus McClellan and Daniel Collins | 95 00 | |
| City of Fall River, for aid rendered Mrs. Robert Lee, Mrs. Robert Martin and Thomas Leeson..... | 63 75 | |
| <i>Amounts carried forward.....</i> | <hr/> | <hr/> \$7,433 36 \$34,584 82 |

Amounts brought forward..... \$7,433 36 \$34,584 82

Received into the Treasury on account of
PAUPERS:

| | |
|---|--------|
| From City of Fitchburg, for aid rendered Catherine Lawless, Catherine Slattery, Patrick Noonan, and D. Rock..... | 150 50 |
| City of Lawrence, for aid rendered Mrs. J. Bethel, Mrs. John Rostran, Mrs. Frank Thayer, Mary Kelly, Mary Carr, Barnard Gilloglan and Felix Gallagher | 153 76 |
| City of Newton, for aid rendered Mrs. J. Ashton..... | 48 00 |
| City of New Bedford, for aid rendered John F. Smith..... | 7 00 |
| City of Newburyport, for overdraft.... | 10 35 |
| City of Springfield, for aid rendered Mrs. W. C. Bissell..... | 58 10 |
| City of Salem, for aid rendered Edward Powers..... | 14 00 |
| City of Somerville, for aid rendered John H. Smith..... | 33 71 |
| City of Somerville, for board of boys at Reform School..... | 106 50 |
| Town of Ayer, for aid rendered Bridget Foley..... | 23 50 |
| Town of Andover, for aid rendered Mary A. Dugan and John A. Mason | 94 00 |
| Town of Bridgewater, for aid rendered Catherine Quinn and Thomas Glynn | 55 50 |
| Town of Blackstone, for aid rendered Mrs. Martin Canfield and Mary A. Roth..... | 101 00 |
| Town of Burlington, for aid rendered Mrs. Travis..... | 3 00 |
| Town of Chelmsford, for aid rendered Ann Molloy, Elizabeth Donahoe, Ann Mealey, and W. F. Patch.... | 74 00 |
| Town of Concord, for aid rendered Elizabeth Howe..... | 6 00 |
| Town of Dennis, for aid rendered Michael Smith..... | 24 00 |
| Town of Dracut, for aid rendered Michael Graham and J. Kittredge.. | 142 00 |
| Town of Groton, for aid rendered John Fannon..... | 1 00 |

Amounts carried forward..... \$8,539 28 \$34,584 82

Amounts brought forward..... \$8,539 28 \$34,584 82

Received into the Treasury on account of
PAUPERS:

| | |
|---|--------|
| From Town of Danvers, for aid rendered Ann M. Welch and Mrs. Wm. Henderson..... | 465 03 |
| Town of Littleton, for aid rendered Mrs. B. Goulding..... | 13 00 |
| Town of Manchester, for aid rendered Ann Quinn..... | 21 00 |
| Town of Malden, for aid rendered George F. Speed..... | 17 00 |
| Town of Milford, for aid rendered Margaret Quinn..... | 90 50 |
| Town of Natick, for aid rendered Ella Witherell and Mrs. P. Moran..... | 81 00 |
| Town of Needham, for aid rendered Martha Roy..... | 60 00 |
| Town of Peabody, for aid rendered Eben B. Osborne..... | 16 61 |
| Town of Somerset, for aid rendered Mrs. Francis Drumm..... | 21 00 |
| Town of Salisbury, for aid rendered Mrs. T. Hunt..... | 3 00 |
| Town of Shirley, for aid rendered Walter Taylor..... | 53 00 |
| Town of Stoneham, for aid rendered Mrs. Francis Mc Rann, and A. McDonald..... | 71 00 |
| Town of Tewksbury, for aid rendered Mrs. A. McDonald..... | 15 00 |
| Town of Tyngsboro, for aid rendered Sarah H. Farwell..... | 20 00 |
| Town of Walpole, for aid rendered Mrs. Geo. Clark..... | 38 00 |
| Town of Wakefield, for aid rendered Mrs. P. Welch..... | 131 20 |
| Town of Waltham, for aid rendered Mrs. Patrick Bermingham and James H. Mitchell..... | 34 73 |
| Town of Weymouth for aid rendered Hannah Handley and Catherine Slattery..... | 75 00 |
| Town of Woburn, for aid rendered Mrs. Wm. Corey, Mary Wellman and Michael Flaherty..... | 116 35 |

Amounts carried forward..... \$9,881 70 \$34,584 82

Amounts brought forward..... \$9,881 70 \$34,583 82

Received into the Treasury on account of
PAUPERS :

| | | |
|--|--------|-------------|
| From Town of Winchester, for aid rendered | | |
| Andrew Harold..... | 41 85 | |
| Town of Woburn, for board of boys at | | |
| Reform School..... | 68 00 | |
| G. B. Alexander, for board of F. P. | | |
| Alexander at Wor. Insane Asylum. | 25 50 | |
| Frank Battles, for board of Augustus S. | | |
| Battles at Danvers Insane Asylum. | 112 07 | |
| Charles H. Bean, for aid rendered John | | |
| F. Bean..... | 9 20 | |
| Alden Y. Caswell, for board of Mary A. | | |
| Caswell at Worcester Insane Asylum | 136 50 | |
| Mary Coughlin, for board of Maria | | |
| Coughlin at Worcester Ins. Asylum. | 54 00 | |
| Hugh Fife, for old building..... | 10 00 | |
| C. W. Fletcher, for board of Warren | | |
| Fletcher at Worcester Insane Asylum | 136 59 | |
| C. H. Knowles, for board of C. V. | | |
| Knowles at Asylum for the Insane, | | |
| Northampton..... | 177 70 | |
| John T. Lurvey, for cash refunded for | | |
| ticket to Bangor..... | 6 00 | |
| Patrick Mellen, for board of Bridget | | |
| Farrell at Worcester Insane Asylum | 90 50 | |
| F. H. Penniman, for board of Hannah | | |
| Penniman at Almshouse..... | 129 64 | |
| J. N. Spalding, for board of Calista J. | | |
| Spalding at Danvers Insane Asylum | 30 89 | |
| S. H. Weaver, for board of Horace | | |
| Weaver at Almshouse..... | 26 00 | |
| John Wheeler, for board of Nellie J. | | |
| Wheeler, at Almshouse..... | 36 00 | |
| Hapgood Wright, for aid to Elizabeth | | |
| Donahoe | 32 00 | |
| L. F. Jewell, Secretary, for railroad | | |
| fares refunded, and board of Horace | | |
| Weaver | 22 85 | |
| George F. Richardson, City Solicitor, | | |
| on account of Mary Muldoon..... | 183 87 | |
| | | 11,210 86 |
| | | <hr/> |
| Transferred from Corporation Tax Account.. | | \$45,794 68 |
| | | 2,000 00 |
| | | <hr/> |
| | | \$47,794 68 |

EXPENDITURES.

Paid SECRETARY OF THE BOARD OF
OVERSEERS OF THE POOR:

| | | |
|---------------------------|----------|----------|
| To Leonard F. Jewell..... | \$800 00 | |
| | <hr/> | \$800 00 |

Paid SUPERINTENDENT AND CHAP-
LAIN OF INSTITUTIONS AT CITY
FARM, AND TEACHER OF RE-
FORM SCHOOL:

| | | |
|---|------------|----------|
| To Lorenzo Phelps, Superintendent, salary. | \$1,500 00 | |
| William A. Lang, Chaplain and Teacher, salary..... | 1,300 00 | |
| | <hr/> | 2,800 00 |

Paid for LABOR AT ALMSHOUSE:

| | | |
|------------------------|----------|------------|
| To John P. Eaton | \$420 00 | |
| Henry S. Phillips..... | 420 00 | |
| Nicholas Pierce..... | 360 00 | |
| Jesse S. Bean..... | 300 00 | |
| Maria M. Mooney..... | 260 00 | |
| Jennie S. Wright..... | 180 00 | |
| Arvilla Pierce..... | 90 00 | |
| Ella S. Wright..... | 28 00 | |
| | <hr/> | \$2,058 00 |

Paid for FUEL, GRAIN, GROCERIES,
PROVISIONS, ETC., USED AT
ALMSHOUSE:

| | | |
|---|------------|------------|
| To Appropriation for Roads and Bridges, for wood..... | \$ 663 00 | |
| Whithed & Co., for coal..... | 349 60 | |
| Coggin, Kidder & Co., for flour..... | 2,263 50 | |
| Wright Bros. & James, for flour..... | 648 00 | |
| S. A. Scripture, for flour, crackers, and baking..... | 687 25 | |
| F. A. Kennedy, for pilot bread..... | 34 04 | |
| Wm. E. Livingston, for meal, fine feed, oats, etc..... | 558 64 | |
| S. N. Wood & Son, for fine feed, meal, etc | 441 56 | |
| C. S. Bean, for beans..... | 24 96 | |
| | <hr/> | |
| Amounts carried forward..... | \$5,670 55 | \$5,658 00 |

Amounts brought forward..... \$5,670 55 \$5,658 00

Paid for FUEL, GRAIN, GROCERIES,
PROVISIONS, ETC., USED AT
ALMSHOUSE:

| | | | |
|----|--|--------|-------------|
| To | Levi Hancock & Son, for beans..... | 128 44 | |
| | G. N. & E. Nichols, for beans..... | 73 62 | |
| | Parker & Evans, for beans..... | 198 68 | |
| | Ela & Puffer, for groceries..... | 9 80 | |
| | Moulton & Goodwin, for groceries..... | 942 84 | |
| | Nichols & Fletcher, for groceries..... | 239 76 | |
| | Wason, Pierce & Co., for groceries,.... | 324 00 | |
| | M. E. Hayes, for tobacco..... | 36 05 | |
| | S. C. Patrick, for tobacco and cigars... | 132 19 | |
| | Spurr, Washburn & Holmes, for groce- ries | 505 27 | |
| | Benjamin Patch, for soap..... | 1 00 | |
| | Union Oil Co., for soap stock..... | 42 76 | |
| | Samuel Horn & Co., for salt lye, grease, and scraps..... | 37 94 | |
| | J. V. Drew, for candy..... | 3 50 | |
| | E. W. Hall, for fruit..... | 3 00 | |
| | French & Puffer, for baskets, brooms, dusters, bags, jars, crockery, etc..... | 108 92 | |
| | Richardson Ice Co., for ice..... | 35 43 | |
| | George F. Libbey, for potatoes..... | 30 00 | |
| | Boston Branch Cash Market, for beef... | 11 64 | |
| | Carll, Jewett & Swift, for pork..... | 105 00 | |
| | James Dollard & Son, for beef..... | 474 56 | |
| | Daniel S. Gray, for provisions..... | 337 97 | |
| | Hunt & Wilder, for pork, salt, etc..... | 479 00 | |
| | Jewett & Swift, for pork..... | 197 00 | |
| | Michael Kelley, for beef..... | 21 56 | |
| | F. E. Putnam, for beef..... | 193 76 | |
| | E. C. Rice, for provisions..... | 7 97 | |
| | J. A. Richardson, for beef and provisions | 326 64 | |
| | A. S. Randlett, for beef..... | 42 10 | |
| | A. F. Wright, for pork and provisions.. | 243 93 | |
| | K. & S. A. Freeman, for fish..... | 572 00 | |
| | French Bros., for fish, etc..... | 26 23 | |
| | W. H. Lord, for fish..... | 140 00 | |
| | Boston & Maine R. R. for transportation | 59 05 | |
| | B. C. F. & N. B. Railroad, for trans- portation | 1 84 | |
| | Nashua & Lowell R. R. for transporta- tion..... | 5 75 | |
| | | <hr/> | 11,769 75 |
| | <i>Amount carried forward</i> | | \$17,427 75 |

Amount brought forward..... \$17,427 75

Paid for SUNDRIES AT ALMSHOUSE:

| | |
|---|----------|
| To Appropriation for Roads and Bridges, for lumber, manure, labor, etc..... | \$236 37 |
| Appropriation for Fire Department, for manure..... | 169 84 |
| Appropriation for Repairs of Public Buildings, for labor, etc..... | 88 26 |
| Appropriation for Water Works, for six per cent. on cost of extension of pipe to Almshouse, less water rates received of sundry persons..... | 169 00 |
| Appropriation for Water Works, for hose, valve and labor..... | 7 00 |
| A. W. Butcher, for iron..... | 40 |
| Cole & Nichols, for sled shoes..... | 5 32 |
| Frank P. Hill & Co., for bolts..... | 2 92 |
| Charles E. Adams, for hardware..... | 1 37 |
| John C. Bennett, for wire line..... | 6 00 |
| Samuel Barton, for mowing machine cutter..... | 7 00 |
| H. A. Fielding, for hardware, tools and seeds..... | 84 50 |
| Rice & Co., for screens..... | 19 47 |
| Rogers, Taylor & Co., for hardware.... | 15 |
| H. B. Shattuck, for hardware..... | 40 |
| Frederick Taylor, for hardware and tools | 18 42 |
| T. Costello & Co., for range, pipe, water fixtures, boiler, dippers, pails, plumb- ing, etc..... | 528 65 |
| S. G. Mack & Co., for castings, labor, etc..... | 29 87 |
| F. W. Proctor, for pipe, hose bibb and labor..... | 9 31 |
| H. H. Wilder & Co., for heater, grate, cans, coal hod, labor, etc..... | 86 62 |
| N. J. Weir & Co., for copper boiler and labor..... | 5 80 |
| Archibald Wheel Co., for wheels, axles, etc..... | 88 43 |
| C. W. Bisbee, for shoeing horses, etc... | 4 90 |
| J. H. Haskell, for sharpening tools..... | 1 30 |
| Hill Bros., for repairing carriages..... | 27 00 |
| E. H. Marshall, for repairing plough... | 1 75 |
| Butler Libby, for lightning rods, points and labor..... | 51 15 |

Amounts carried forward \$1,651 20 \$17,427 75

Amounts brought forward..... \$1,651 20 \$17,427 75

Paid for SUNDRIES AT ALMSHOUSE:

| | |
|--|--------|
| To Charles Proctor, for repairing roller..... | 9 34 |
| C. A. Ross & Co., for repairing carriages | 48 66 |
| William Robinson, for repairing wagon. | 1 50 |
| J. A. Brabrook, for repairing harness, collar, etc..... | 29 55 |
| Sawyer & Taylor, for repairing harness. | 7 85 |
| Howes & Burnham, for lumber | 196 08 |
| M. C. Pratt & Co., for lumber..... | 3 06 |
| E. Rose, for bean poles..... | 10 00 |
| N. T. Staples, for drain pipe..... | 14 45 |
| Benner Bros., for hair and labor on mattress | 5 75 |
| C. B. Coburn & Co., for lead, paint, oil, varnish, spirits turpentine, alcohol, brushes, twine, oil cask, etc..... | 166 71 |
| Fiske & Spalding, for paint, glass, put- ty, varnish and labor..... | 342 41 |
| E. W. Hall, for fireworks..... | 15 00 |
| Wm. E. Livingston, for lime, plaster, hair, cement, etc..... | 54 47 |
| C. P. Talbot & Co., for chloride lime... | 5 17 |
| W. H. Worcester & Co., for barometer. | 1 00 |
| F. H. Butler & Co., for combs..... | 1 72 |
| C. F. Blanchard & Co., for cigars..... | 21 00 |
| Patten & Co., for plants..... | 2 15 |
| Nichols & Hutchins, for refreshments, use of dishes and labor..... | 128 00 |
| Geo. L. Huntoon, for use of horses and carriage..... | 8 25 |
| H. O. Morse, for use of horse and car- riage..... | 1 50 |
| J. L. Noyes, for use of horse..... | 18 00 |
| Leonard Brown, for printing..... | 1 50 |
| Leonard Brown & Co., for paper and printing..... | 2 25 |
| Harrington Bros., for printing..... | 5 50 |
| F. P. Coggeshall, for books, stationery, etc..... | 73 01 |
| H. C. Church, for books, stationery, etc. | 2 60 |
| J. Merrill & Son, for books, stationery, etc..... | 31 77 |
| Lorenzo Phelps, for cash paid for news- papers, postage, etc..... | 17 81 |
| Town of Chelmsford, for taxes of 1879.. | 37 44 |

Amounts carried forward..... \$2,914 70 \$17,427 75

Amounts brought forward..... \$2,914 70 \$17,427 75

Paid for SUNDRIES AT ALMSHOUSE :

| | | |
|---|-------|----------|
| To John P. Eaton, for cash paid for rail- road tickets..... | 4 33 | |
| Francis D. Munn, for expenses to Spring- field and Northampton..... | 15 00 | |
| John A. G. Richardson, for expenses of Overseers of the Poor to Worcester... | 50 05 | |
| M. Corbett, for appraising property at Almshouse..... | 5 00 | |
| P. Cummiskey, for appraising property at Almshouse..... | 5 00 | |
| T. D. Berry for labor..... | 5 00 | |
| O. Blodgett, for labor..... | 15 00 | |
| Boston & Maine R. R. for transportation | 4 50 | |
| Boston & Lowell R. R. for transportation | 12 11 | |
| | | 3,030 69 |

Paid for CLOTHING, DRY GOODS,
ETC., at ALMSHOUSE :

| | | |
|--|----------|----------|
| To William P. Brazer & Co., for hats, mit- tens, etc..... | \$ 34 50 | |
| J. P. Folsom, for dry goods..... | 20 95 | |
| J. P. Folsom & Co., for dry goods..... | 23 35 | |
| H. Hosford & Co., for dry goods, etc... | 159 56 | |
| Putnam & Son, for clothing..... | 17 25 | |
| Willard A. Brown, for leather and find- ings..... | 16 88 | |
| D. L. Dimmock, for leather, etc..... | 124 19 | |
| Josiah Gates & Sons, for leather..... | 1 50 | |
| Daniel Swan, for shoes..... | 9 35 | |
| | | \$407 53 |

Paid on account of FREE DISPENSARY :

| | | |
|--|----------|-------------|
| To Appropriation for School Honses, for lumber, paint and varnish..... | \$ 15 21 | |
| Appropriation for Repairs of Public Buildings, for paint, varnish, labor, etc | 124 04 | |
| Appropriation for Water Works, for use of water..... | 8 17 | |
| A. L. Brooks & Co., for lumber..... | 25 98 | |
| Davis & Sargent, for lumber..... | 14 00 | |
| Fiske & Spalding, for moulding..... | 60 | |
| Griffin & Lake, for turning..... | 40 | |
| H. B. Shattuck, for hardware, etc..... | 6 82 | |
| <i>Amounts carried forward</i> | \$195 22 | \$20,865 97 |

Amounts brought forward..... \$195 22 \$20,865 97

Paid on account of FREE DISPENSARY :

| | |
|--|--------|
| To Frederick Taylor, for hardware..... | 4 00 |
| T. Costello & Co., for gas stove and tubing | 1 49 |
| T. R. Garity, for pipe, gas fixtures and labor..... | 8 65 |
| Offut & Whittaker, for brooms, brush, etc | 2 00 |
| W. T. Bradley, for oil cloth, towel rack, duster, etc | 9 36 |
| Joseph Plunkett, for ease of drawers... | 15 00 |
| C. B. Coburn & Co., for bleached shellac | 44 |
| C. R. Kimball, for drugs and medicines, | 49 53 |
| Weeks & Potter, for drugs, medicines, etc | 481 02 |
| Bacheller, Dumas & Co., for blank books | 14 25 |
| Leonard Brown & Co., for printing..... | 4 75 |
| Stone, Bacheller & Livingston, for printing | 9 75 |
| F. P. Coggeshall, for stationery, etc.... | 3 65 |
| D. N. Patterson, for services as clerk.. | 66 66 |
| J. J. Colton, for expenses in purchasing supplies..... | 6 29 |
| Walter H. Leighton, for expenses in purchasing supplies..... | 4 00 |
| T. F. Gardner, for cleaning carpet..... | 3 00 |
| James Leach, for teaming..... | 50 |
| Penniman & Co.'s Express, for transportation | 40 |
| William Roberts, for teaming..... | 2 50 |
| Francis S. Smith, for teaming | 50 |
| Catherine Sullivan, for labor..... | 2 00 |

884 96³

Paid for DRUGS, MEDICINES, AND SERVICES OF PHYSICIANS :

| | |
|---|----------|
| To Carleton & Hovey, for drugs and medicines..... | \$141 67 |
| Crowell & Harrison, for drugs and medicines..... | 9 00 |
| E. W. Trueworthy, for spinal brace and plasters | 16 00 |
| Nathan Allen, for professional services.. | 8 40 |
| Solon Bartlett, for professional services. | 2 00 |
| Benoit & Merriam, for professional services..... | 12 00 |

Amounts carried forward..... \$189 07 \$21,750 93

Amounts brought forward..... \$189 07 \$21,750 93

Paid for DRUGS, MEDICINES, AND
SERVICES OF PHYSICIANS:

| | | |
|---|-------|--------|
| To N. B. Edwards, for professional services..... | 6 00 | |
| Lorenzo S. Fox, for professional services..... | 3 80 | |
| L. Huntress, Jr., for professional services and medicine..... | 20 35 | |
| Edward Hyde, for professional services. | 2 00 | |
| John C. Irish, for professional services.. | 16 00 | |
| A. W. Lavigne, for professional services | 8 00 | |
| George C. Osgood, for professional services..... | 6 00 | |
| George H. Pillsbury, for professional services..... | 2 00 | |
| M. G. Parker, for professional services. | 2 00 | |
| Hermon J. Smith, for professional services..... | 7 00 | |
| | <hr/> | 262 22 |

Paid for COFFINS, INTERMENTS,
ETC.:

| | | |
|--|----------|--------|
| To Appropriation for Repairs of Public Buildings, for labor..... | \$146 60 | |
| Jonathan Kendall, for shellac..... | 4 13 | |
| M. C. Pratt & Co., for lumber..... | 176 96 | |
| J. W. Brooks, for burial of sundry persons..... | 180 00 | |
| J. B. Currier, for burial of sundry persons..... | 9 50 | |
| C. T. Chamberlin, for burial of sundry persons..... | 88 00 | |
| Peter Davey, for burial of sundry persons..... | 57 00 | |
| Hanavor & Co., for burial of sundry persons..... | 30 00 | |
| Terrence Hanavor, for burial of sundry persons..... | 113 00 | |
| Hanavor & McDermott, for burial of sundry persons..... | 66 00 | |
| J. Tinkham, for coffin and removal of Ellen Shannon..... | 10 00 | |
| | <hr/> | 881 19 |

Amount carried forward..... \$22,894 34

Amount brought forward..... \$22,894 34

Paid HOSPITALS, ETC., FOR SUP-
PORT OF SUNDRY PERSONS:

| | | |
|--|------------|-------------|
| To Commonwealth of Mass., for support of Mary Glynn, Betsey Mullen, Caroline Atherton, Bridget Fox, Bridget T. Moran, Mary Quigley, Mercy A. Campbell, Flora Bethune, Ellen O'Leary, Hannah Burke, Catherine Marshall, Michael Sullivan, David Connor, John F. Bradley, Thomas Butler, Edward Thompson, Edward B. Hunt, Maurice J. Connell, J. Shea- hey, F. Fahey, William Earles, Pat- rick Brennan, Daniel Coughlan, John Dowd, John Paine, Edward Follen, Thomas Collins, John Cunningham, John E. O'Toole, John Glover, Frank Fahey, Peter Callahan and Horace F. Slocum..... | \$1,104 80 | |
| Essex County House of Correction, for support of John Cascy, Joseph Gould Thomas L. Hanson, Peter Steakem, and Thomas P. Tuttle..... | 38 84 | |
| Charles J. Adams, for support of prison- ers in Middlesex County House of Correction..... | 595 86 | |
| Asylum for Chronic Insane (Worcester) for support of Louisa Parker and Enoch Lewis..... | 376 41 | |
| Worcester Lunatic Hospital, for support of Ellen Golden, Roxanna Putnam, Eleanor B. Parker, Mary A. Caswell, Caroline M. Prescott, Helen S. Dud- ley, Ann Curley, Maria Coughlin, Elnora Wallace, Christine Wilson, F. P. Alexander, W. C. Chambers, and Warren Fletcher..... | 1,869 73 | |
| Hospital for the Insane (Danvers), for support of Abbic R. Virgin, Nellie J. Wheeler, Calista J. Spalding, Augus- tus S. Battles, Patrick Callahan, James Hendrick, Charles O. Streeter, Henry A. Rolfe, Peter Callahan, Michael W. Ring, Horace F. Slocum, and Patrick A. McDowell..... | 1,129 00 | |
| <i>Amounts carried forward</i> | \$5,114 64 | \$22,894 34 |

Amounts brought forward..... \$5,114 64 \$22,894 34

Paid HOSPITALS, ETC., FOR SUP-
PORT OF SUNDRY PERSONS :

| | | |
|---|----------|----------------|
| To Taunton Lunatic Hospital, for support of Jane McAnnally and Alonzo Shute... | 205 47 | |
| Hospital for the Insane (Northampton), for support of Bridget Clune, Eliza Perry, Jane Maguire, Nancy Peabody, Charles V. Knowles and George T. Lawrence..... | 1,090 18 | |
| St. John's Hospital, for support of Alice Dougherty, Fanny Dyer, Mary Short, Mary O'Neil, Ellen Collins, Mary Barry, Mary A. Conlon, Anna Creigh- ton, Mary Bouchet, Lizzie Reilly, Mary McGuinness, Catherine Thayer, Bridget Riley, Bridget McGrath, Sarah McManus, Winnifred Collins, Mary McManus, Ellen McCarron, Mary Dunn, Mary Haughty, Thomas Burke, Jeremiah Ready, Charles Leighton, John Maynard, and Patrick Noonan.. | 833 75 | |
| | | <hr/> 7,244 04 |

Paid CITIES AND TOWNS FOR AID
RENDERED SUNDRY PERSONS :

| | | |
|---|----------|-------------------|
| To City of Boston, for aid rendered Jacin- tha Bowles, Joanna Gannon, Joanna Williams, Hannah Hunt, Mary E. Oakes, Bridget O'Brien, Leona Peter- son, Mary Pierce, Catherine Sexton, Sarah Shehan, Agnes Underwood, Joanna Stevens, Emily Simonds, Jo- sephine Franklin, Elizabeth Hadley, Mary C. White, Mary Keyes, Catherine McKeever, Mrs. Wm. H. Philbrick, child of Jesse T. Oakley, Patrick Gar- rity, George B. Wood, Richard Kaime Camillo Bravo, Daniel Crowley, Pat- rick H. O'Connor, Thomas J. Tuttle Charles H. Corey, Samuel I. Gates, Arthur J. Killeen, Michael Glynn, Na- thaniel Lew, Eddie Ordway, Michael T. McNamara and burial of James Gormley, Henry Pugsley and Charles Weston | \$583 84 | |
| <i>Amounts carried forward</i> | \$583 84 | <hr/> \$30,138 38 |

Amounts brought forward..... \$583 84 \$30,138 38

Paid CITIES AND TOWNS FOR AID
RENDERED SUNDRY PERSONS:

| | | |
|---|--------|--|
| To City of Cambridge, for aid rendered Henry A. Mann..... | 70 24 | |
| City of Fall River, for aid rendered Mary A. Me Cormick, Catherine McCann and family and George M. Glover and family..... | 165 37 | |
| City of Fitchburg, for aid rendered Dennis Morrissey..... | 7 75 | |
| City of Gloucester, for aid rendered Wm. Todd and family..... | 71 16 | |
| City of Haverhill, for aid rendered Mrs. George Goodwin, John Curry and Arthur J. Killeen..... | 229 50 | |
| City of Lawrence, for aid rendered Mary McGuire, Anna Lynch, Nellie C. Moore, Elizabeth Stackpole, Mary Redmond, Arthur J. Killeen, John Glynn, Peter Brady, family of Thomas Mangan, and family of George B. King..... | 200 25 | |
| City of Lynn, for aid rendered Mrs. Samuel C. Morey, Mrs. Lyman J. Morey and Edwin J. Howe and family..... | 270 85 | |
| City of New Bedford, for aid rendered Catherine Clynes and family, and Thomas Place and family..... | 16 50 | |
| City of Newburyport, for aid rendered Ann Babson..... | 20 70 | |
| City of Salem, for aid rendered Catherine Jordan..... | 38 60 | |
| City of Springfield, for aid rendered Edward Donnelly..... | 45 32 | |
| City of Somerville, for aid rendered Elizabeth Stevens and burial of Stephen Richardson | 28 10 | |
| Town of Ayer, for aid rendered Frank W. Straw..... | 91 00 | |
| Town of Ashburnham, for aid rendered David Rogers and family..... | 5 82 | |
| Town of Beverly, for aid rendered A. W. Montcalm | 81 25 | |
| Town of Chelmsford, for aid rendered Henry S. Byam..... | 53 00 | |

Amounts carried forward..... \$1,979 25 \$30,138 38

Amounts brought forward..... \$1,979 25 \$30,138 38

| | | |
|--|-------|----------|
| To City Worcester, for aid rendered Huldah C. Brown, Patrick Behan and Stephen Cabeau..... | 28 22 | |
| Town of Ipswich, for aid rendered John S. Spiller..... | 5 00 | |
| Town of Milford, for aid rendered Patrick Dillon..... | 15 50 | |
| Town of Methuen, for aid rendered Mary Giblin | 19 10 | |
| Town of Millbury, for aid rendered John Little..... | 23 38 | |
| Town of North Brookfield, for aid rendered Bridget Coughlin and family... | 74 51 | |
| Town of Townsend, for aid rendered family of David D. Gilson..... | 17 00 | |
| Town of Topsfield, for aid rendered Joseph P. Stiles..... | 19 50 | |
| Town of Warren, for aid rendered B. F. Peirce and family..... | 77 72 | |
| | | 2,259 18 |

Paid for SUPPLIES FURNISHED on
ORDERS FROM THE OVER-
SEERS OF THE POOR:

| | | |
|---|------------|-------------|
| To Appropriation for Roads and Bridges, for fuel and labor delivering same..... | \$7,977 00 | |
| E. H. Adams, for shoes..... | 6 00 | |
| Rufus O. Adams, for wood..... | 8 00 | |
| J. A. Burt, for provisions..... | 16 00 | |
| H. W. Brickett, for provisions..... | 10 27 | |
| Buttrick & Co., for groceries..... | 110 00 | |
| Charles Callahan, for groceries..... | 175 83 | |
| Stephen Castles, Jr., for groceries..... | 8 00 | |
| John Courtney, for groceries..... | 27 00 | |
| Currier & Bickford, for groceries..... | 3 00 | |
| J. F. Callahan, for groceries..... | 4 00 | |
| Thomas Egan, for groceries..... | 3 00 | |
| Ela & Page, for groceries..... | 6 92 | |
| Eames & McQuesten, for dry goods.... | 7 00 | |
| E. F. Faulkner, for provisions..... | 18 00 | |
| Fuller, Clark & Fuller, for groceries.... | 7 00 | |
| Martin Giblin, for provisions..... | 4 00 | |
| Greenwood Bros, for provisions..... | 17 00 | |
| I. K. Goodale, for groceries..... | 4 00 | |
| L. W. Hall, for provisions..... | 6 51 | |
| <i>Amounts carried forward</i> | \$8,418 53 | \$32,397 56 |

Amounts brought forward..... \$8,418 53 \$32,397 56

Paid for SUPPLIES FURNISHED ON
ORDERS FROM THE OVERSEERS
OF THE POOR:

| | | |
|---|--------|--|
| To Hartwell & Co., for groceries..... | 40 00 | |
| H. Hosford & Co., for blanket..... | 1 00 | |
| W. A. Ingham & Co., for groceries.... | 112 00 | |
| Frank J. Joyce, for groceries and pro- visions..... | 64 60 | |
| Charles E. Hallowell, for provisions.... | 2 48 | |
| Patrick Keyes, for groceries and pro- visions..... | 122 00 | |
| D. Kittredge & Son, for shoes..... | 14 50 | |
| William Kittredge, for fuel..... | 119 50 | |
| Edward Kelley, for groceries and pro- visions..... | 78 00 | |
| Thomas Knowles, for groceries and pro- visions..... | 11 00 | |
| Miller Bros., for groceries..... | 5 00 | |
| Wm. E. Livingston, for fuel..... | 43 00 | |
| A. LeBlanc, for groceries..... | 4 00 | |
| Lowell Gas Light Co., for coke..... | 3 00 | |
| William MeAloon, for groceries..... | 5 00 | |
| D. W. Manning, for groceries and pro- visions..... | 60 00 | |
| A. McSorley, for groceries..... | 38 00 | |
| Nichols & Fletcher, for groceries,..... | 165 50 | |
| J. Nolan, for groceries and provisions... | 31 00 | |
| Niven & Thompson, for provisions..... | 10 00 | |
| Michael J. Noonan, for groceries..... | 5 00 | |
| James Owens, for groceries..... | 282 25 | |
| B. H. Peabody, for fuel..... | 6 00 | |
| Putnam & Son, for clothing..... | 5 00 | |
| L. H. Quimby & Co., for provisions.... | 9 52 | |
| Runels & Vinall, for groceries..... | 54 00 | |
| J. B. Richardson & Sons, for groceries. | 12 00 | |
| H. H. Rodliff, for groceries | 30 00 | |
| Richardson & Smith, for wood..... | 2 00 | |
| Stickney & Spofford, for groceries..... | 23 00 | |
| Sheldon & Rodliff, for groceries and pro- visions..... | 18 00 | |
| H. W. Streeter, for groceries..... | 270 50 | |
| C. E. Shorey & Co., for groceries..... | 10 00 | |
| J. Saunders, for provisions..... | 14 00 | |
| Ranlett & Plaisted, for groceries..... | 10 00 | |

Amounts carried forward..... \$10,099 38 \$32,397 56

Amounts brought forward..... \$10,099 38 \$32,397 56

Paid for SUPPLIES FURNISHED ON
ORDERS FROM THE OVERSEERS
OF THE POOR:

| | | |
|---|----------|-----------|
| To James Slattery, for groceries..... | 3 00 | |
| Albert Wheeler & Co., for groceries.... | 58 00 | |
| John Whitty, for groceries..... | 2 00 | |
| Wheeler & Son, for clothing..... | 12 20 | |
| Worthen & Coburn, for groceries..... | 3 00 | |
| E. B. Worthen & Co., for groceries.... | 3 00 | |
| C. B. Washburn, for groceries..... | 1 00 | |
| Whithed & Co., for 300 tons of coal (at City Yard) | 1,245 00 | |
| Appropriation for Roads and Bridges, for teaming 300 tons of coal to City Yard..... | 128 53 | |
| | <hr/> | 11,555 11 |

Paid for AID RENDERED SUNDRY
PERSONS OUT OF THE ALMS-
HOUSE:

| | | |
|---|----------------|-------------------|
| To Boston & Lowell R. R., for railroad tick- ets and transportation of furniture.... | \$ 26 15 | |
| Boston & Maine R. R. for railroad tickets | 27 80 | |
| Nashua & Lowell R. R., for transporta- tion of furniture..... | 3 98 | |
| Old Colony R. R., for railroad tickets... | 2 03 | |
| J. E. Short, for railroad tickets..... | 182 48 | |
| Ira Bailey, for board of Maria Baker... | 91 00 | |
| Mrs. W. C. Bissell, for assistance in cash..... | 15 00 | |
| Hannah Campbell for assistance in cash. | 48 00 | |
| Mary Caufield, for assistance in cash... | 50 00 | |
| Mrs. Martin Canfield, for assistance in cash..... | 96 00 | |
| Rebecca B. Coburn, for board of Nehe- miah Jones | 91 25 | |
| Mrs. L. Collins, for board of Margaret Carr..... | 7 00 | |
| Mary A. Carr, for rent of tenement for Daniel Collins..... | 15 00 | |
| Rose Ann Connell, for board of Mary E. McManus | 9 63 | |
| Mrs. Ceylon A. Clark, for board and care of Elizabeth Varney..... | 21 43 | |
| <i>Amounts carried forward</i> | <hr/> \$686 75 | <hr/> \$43,952 67 |

Amounts brought forward..... \$686 75 \$43,952 67

Paid for AID RENDERED SUNDRY
PERSONS OUT OF THE ALMS-
HOUSE:

| | |
|--|--------|
| To Mrs. R. W. Davis, for board of Luey Ordway | 91 25 |
| Thomas Donohue, for rent of tenement for Michael Daly..... | 84 00 |
| P. J. Devine, for rent of tenement for Mary Campbell..... | 60 00 |
| Rachel E. Douglass for assistanee in cash..... | 60 00 |
| Mrs. Willard Dudley, for assistance in cash..... | 120 00 |
| John Felton, for assistanee in eash..... | 20 00 |
| Mrs. Loraine Foster, for board of S. E. Moulton..... | 60 75 |
| Martin F. Favor, for board of John S. Williams..... | 111 94 |
| Sarah H. Farwell, for assistanee in cash | 25 00 |
| W. B. Glover, for assistanee in eash... | 96 00 |
| Wm. M. Green, for eash for Eben Crane | 4 00 |
| James U. Gage, for rent of tenement for Mrs. Robert Lee..... | 3 00 |
| J. G. Hunton, for board of Charles Reynolds..... | 4 00 |
| John Harrington, for rent of tenement for Mrs. Ernest Godicke..... | 12 00 |
| Mrs. Wm. Henderson, for assistanee in eash..... | 70 00 |
| Mary Harris, for assistance in cash..... | 45 00 |
| John Henry, for moving furniture..... | 2 50 |
| Timothy Kelley, for moving furniture... | 1 50 |
| John Lynch, for rent of tenement for Mrs. Edward Roach..... | 4 00 |
| Mrs. Cyrus Luseomb, for board of Jane Burgin..... | 32 84 |
| John C. Little, for moving furniture.... | 2 50 |
| Kate McLean, for board and eare of Luey Perkins..... | 8 25 |
| Frank Morris, for board and care of Mary Mahoney..... | 10 00 |
| William McClure, for care of Michael Morris..... | 12 00 |
| James Moran, for board and care of Alice Little..... | 6 00 |

Amounts carried forward..... \$1,633 28 \$43,952 67

Amounts brought forward..... \$1,633 28 \$43,952 67

Paid for AID RENDERED SUNDRY
PERSONS OUT OF THE ALMS-
HOUSE:

| | | |
|--|-------|----------|
| To Daniel McCarty, for moving furniture.. | 1 00 | |
| A. Merrill, for moving furniture..... | 1 00 | |
| Mrs. B. Nutter, for board of Mrs. Valen- tine..... | 23 88 | |
| Martha J. Nichols, for board of Sarah E. Moulton..... | 15 25 | |
| Estate of Bridget O'Riley, for rent of tenement for Mary McManus..... | 18 00 | |
| E. B. Patch, for furniture..... | 3 00 | |
| Margaret Quinn, for assistance in cash.. | 60 00 | |
| Rockingham County Farm, for aid ren- dered Peter Commerford..... | 6 65 | |
| Abbie Randall, for care of Mrs. James McManus | 12 00 | |
| John W. Reed, for rent of tenement for Michael Conway..... | 24 00 | |
| Mrs. C. B. Richmond, for board of Sarah E. Moulton..... | 15 25 | |
| Kilburn Smith, for assistance in cash... | 30 00 | |
| Levi B. Stevens, for aid rendered Rachel Douglass and child..... | 1 50 | |
| Mrs. Horace Smith, for board of Jane Burgin..... | 29 00 | |
| John Sleeper, for conveying persons to Hospital..... | 1 40 | |
| A. J. Trueworthy, for conveying per- sons to Almshouse..... | 75 | |
| Jane Turner, for assistance in cash..... | 17 50 | |
| Mrs. S. S. Wheeler, for board of Mrs. Frank Thayer & Son..... | 9 50 | |
| John Watson, for conveying person to Hospital..... | 1 00 | |
| | | 1,903 96 |

Paid for SUNDRIES OUT OF THE
ALMSHOUSE:

| | | |
|---|---------|-------------|
| To Appropriation for Repairs of Public Buildings, for chair..... | \$ 2 00 | |
| J. Merrill & Son, for blank book, sta- tionery, etc..... | 18 48 | |
| Marston & Prince, for stationery. etc... | 2 60 | |
| <i>Amounts carried forward</i> | \$23 08 | \$45,856 63 |

Amounts brought forward..... \$23 08 \$45,856 63

Paid for SUNDRIES OUT OF ALMS-
HOUSE:

| | | |
|---|--------|--------------------|
| To Leonard Brown, for envelopes..... | 2 50 | |
| Leonard Brown & Co., for envelopes, postal cards and printing..... | 5 00 | |
| C. L. Knapp & Son, for printing..... | 8 75 | |
| Morning Times, for printing and binding | 9 00 | |
| Stone, Bacheller & Livingston, for print- ing and binding | 72 60 | |
| J. Puffer & Son, for chair cushions..... | 1 30 | |
| Walter F. Chapman, for services in office of Secretary of Overseers of the Poor. | 393 50 | |
| L. F. Jewell, for cash paid for postage stamps, telegrams, travelling expenses etc..... | 57 02 | |
| Elias Clark, for carriage hire..... | 1 00 | |
| H. O. Morse, for carriage hire..... | 1 05 | |
| G. W. Norris, for carriage hire..... | 30 00 | |
| | | 604 80 |
| Whole expenditure for the year..... | | \$46,461 43 |
| Balance undrawn January 1, 1880..... | | 1,333 25 |
| | | <u>\$47,794 68</u> |

POLICE.

| | | |
|--|-------------|-------------|
| Balance undrawn January 1, 1879..... | \$ 1,181 98 | |
| Appropriated and assessed in 1879..... | 40,000 00 | |
| | | \$41,181 98 |

RECEIPTS.

Received into the Treasury on account of
POLICE:

| | | |
|---|-----------|-------------|
| From Albert Pinder, City Marshal, for services of police officers..... | \$ 754 18 | |
| Frederick Lovejoy, City Marshal for services of police officers..... | 208 21 | |
| Frederick Lovejoy, City Marshal, for conveyance of insane persons in 1878..... | 167 30 | |
| Samuel P. Hadley, Clerk of Police Court, for services of police officers, fines, and cost in city ordinance cases, etc..... | 3,168 67 | |
| Reserved Fund, for services of J. F. McCaffrey assisting City Solicitor.. | 82 50 | |
| | | 4,380 86 |
| | | \$45,562 84 |
| Transferred from Corporation Tax Account. | | 5,000 00 |
| | | \$50,562 84 |

EXPENDITURES :

Paid CITY MARSHAL AND POLICE
JUSTICE;

| | | | |
|----|---|------------|----------|
| To | Albert Pinder, City Marshal, salary | \$1,612 50 | |
| | Nathan Crosby, Police Justice, salary... | 100 00 | |
| | | | <hr/> |
| | | | 1,712 50 |

Paid for SERVICES OF POLICE
OFFICERS :

| | | | |
|----|---|-------------|------------|
| To | Jacob G. Favor, Deputy Marshal..... | \$1,120 25 | |
| | David H. Goodhue, Captain of Night Police..... | 1,106 25 | |
| | Levi Brown..... | 875 75 | |
| | John Buchanan..... | 816 25 | |
| | Allen P. Bickford..... | 871 50 | |
| | Andrew Blood..... | 85 25 | |
| | John C. Blood | 378 75 | |
| | James Crowley..... | 896 75 | |
| | Cornelius Collins | 7 50 | |
| | John C. Cox..... | 7 50 | |
| | Daniel D. Driscoll..... | 864 75 | |
| | Alfred Day..... | 89 37 | |
| | George R. Davis..... | 88 00 | |
| | Asa F. Esty..... | 918 25 | |
| | Harrison H. Fuller..... | 937 75 | |
| | Wm. P. Farrington..... | 780 25 | |
| | Henry Farrington..... | 937 00 | |
| | Augustus B. Foss..... | 85 25 | |
| | Henry J. Freeman..... | 766 37 | |
| | Moses T. Flanders..... | 927 50 | |
| | John C. Furlong..... | 833 00 | |
| | Frank Goodwin..... | 909 50 | |
| | Henry Garrison..... | 46 75 | |
| | John H. Griffin..... | 688 38 | |
| | Charles Howard..... | 952 75 | |
| | Daniel M. Hayes | 940 50 | |
| | Simon B. Harris..... | 170 50 | |
| | James Hadley..... | 736 12 | |
| | Thomas Ingalls..... | 884 00 | |
| | Wm. B. Jones | 897 75 | |
| | Patrick Kelley..... | 924 13 | |
| | Albert E. Libbey..... | 920 25 | |
| | Isaac L. Libbey..... | 814 75 | |
| | Wm. M. Lee..... | 917 50 | |
| | Edward Lavelle..... | 895 62 | |
| | | | <hr/> |
| | Amounts carried forward..... | \$24,091 74 | \$1,712 50 |

Amounts brought forward..... \$24,091 74 \$1,712 50

Paid for SERVICES OF POLICE
OFFICERS :

| | | |
|-------------------------|--------|-----------|
| To Daniel W. Lane..... | 718 12 | |
| John E. McCaffrey..... | 739 25 | |
| Frank N. Miles..... | 821 50 | |
| John A. Meloy..... | 857 50 | |
| Benjamin G. Mooney..... | 82 50 | |
| James McLaughlin..... | 911 01 | |
| M. E. McDonald..... | 937 75 | |
| James A. McQuade..... | 650 12 | |
| James McNabb..... | 624 00 | |
| Mason W. Presby..... | 848 75 | |
| Alonzo J. Page..... | 933 25 | |
| Henry C. Pike..... | 863 75 | |
| Thomas F. Ring..... | 673 87 | |
| Lawrence Roark..... | 595 62 | |
| John L. Stevens..... | 841 25 | |
| Thomas J. Sanborn.... | 638 50 | |
| Edward Stockman..... | 89 37 | |
| John W. Tilton..... | 986 50 | |
| Herman N. Tilton..... | 938 75 | |
| Frank T. Thissell..... | 939 13 | |
| Henry M. Thompson..... | 918 75 | |
| Luke Veo..... | 934 00 | |
| Levi H. Witham..... | 947 88 | |
| James E. Webster..... | 908 25 | |
| Thomas Welch..... | 782 75 | |
| Augustus Weymouth..... | 930 63 | |
| Daniel W. Walker..... | 535 00 | |
| | | 44,739 49 |

Paid for SPECIAL POLICE FOR
FOURTH OF JULY :

| | | |
|--------------------------------------|---------|-------------|
| To Frank A. Abbott..... | \$5 00 | |
| Allen Buchanan..... | 6 25 | |
| John J. Barrows..... | 6 25 | |
| Edward H. Burke..... | 5 00 | |
| George M. Clark..... | 6 25 | |
| George B. Crawford..... | 6 25 | |
| William Clifford..... | 6 25 | |
| Russell S. Clifford..... | 6 25 | |
| Edward Carney..... | 6 25 | |
| William Dowland..... | 6 25 | |
| Augustus Dana..... | 6 25 | |
| <i>Amounts carried forward</i> | \$66 25 | \$46,451 99 |

Amounts brought forward..... \$66 25 \$46,451 99

Paid SPECIAL POLICE OFFICERS
FOR FOURTH OF JULY:

| | | |
|-------------------------------------|------|-------------|
| To Augustus B. Foss..... | 6 25 | |
| Patrick Flannagan..... | 6 25 | |
| Patrick Fitzpatrick | 6 25 | |
| Frank Emerson..... | 6 25 | |
| Charles Gregg..... | 5 00 | |
| John Gallagher..... | 5 00 | |
| John Grant..... | 6 25 | |
| Richard Green..... | 6 25 | |
| John Hixon..... | 6 25 | |
| George L. Hubbard..... | 6 25 | |
| Wm. H. Holbrook..... | 6 25 | |
| Wm. P. Jaques..... | 6 25 | |
| N. T. Jewett..... | 6 25 | |
| Wm. R. Kew..... | 6 25 | |
| Henry W. Ladd..... | 5 00 | |
| Patrick H. Lee..... | 6 25 | |
| James McDonald..... | 5 00 | |
| John S. Mosher | 6 25 | |
| Frank McQuade..... | 6 25 | |
| Thomas McLaughlin | 6 25 | |
| Thomas McDermott..... | 2 50 | |
| John Maborn..... | 2 50 | |
| Allen P. Miller..... | 5 00 | |
| Patrick McQuade..... | 5 00 | |
| Thomas Mahan..... | 2 50 | |
| John F. Moran..... | 6 25 | |
| A. F. Nudd..... | 5 00 | |
| John Nawn..... | 6 25 | |
| John O'Hearn..... | 5 00 | |
| John O'Hara..... | 6 25 | |
| Albert W. Ober..... | 6 25 | |
| Charles C. Packard | 6 25 | |
| Martin Peabody..... | 5 00 | |
| Chester Ryder..... | 6 25 | |
| Joseph Ritchle..... | 6 25 | |
| Abraham P. Roberts..... | 6 25 | |
| James H. Taylor..... | 6 25 | |
| Stephen L. Young..... | 6 25 | |
| Alden A. Usher..... | 5 00 | |
| John J. Warren..... | 3 75 | |
| Patrick Welch..... | 6 25 | |
| | | 296 25 |
| <i>Amount carried forward</i> | | \$46,748 24 |

Amount brought forward..... \$46,748 24

Paid for SUNDRIES :

| | |
|---|----------|
| To Appropriation for Schools, for brooms, brushes and mats..... | \$ 16 58 |
| Appropriation for School Houses, for paint and varnish..... | 26 25 |
| Appropriation for Roads and Bridges, for labor on fuel..... | 38 67 |
| Reserved Fund, for coal..... | 53 53 |
| Appropriation for Fire Department, for washing out sewer..... | 3 00 |
| Appropriation for Repairs of Public Buildings, for labor..... | 47 71 |
| Appropriation for Water Works, for use of water..... | 90 00 |
| William Clifford, for services as janitor. | 664 00 |
| Hamilton E. Reynolds, for services as janitor..... | 66 00 |
| Daniel D. Driscoll, for travelling ex- penses..... | 4 00 |
| Jacob G. Favor, for cash paid for post- age stamps, ink, telegrams, travelling expenses, etc..... | 20 99 |
| H. H. Fuller, for cash paid for convey- ance of insane persons and prisoners, travelling expenses, etc..... | 204 45 |
| Simon B. Harris, for use of horse and carriage, travelling expenses, etc..... | 11 00 |
| Daniel M. Hayes, for travelling expenses and assistance..... | 24 40 |
| Isaac L. Libby, for cash paid for labor at Police Station, provisions, etc..... | 66 75 |
| B. G. Mooney, for cash paid for convey- ance of insane persons, etc..... | 40 70 |
| M. E. McDonald, for cash paid for trav- elling expenses and telegrams..... | 12 75 |
| John F. Ring, for cash paid expenses in arrest of prisoners..... | 13 50 |
| Augustus Weymouth, for cash paid for conveyance of prisoners, travelling ex- penses and telegrams..... | 21 35 |
| Hermon J. Smith, for professional ser- vices at Police Station..... | 2 00 |
| Charles Gould & Co., for soap..... | 4 00 |
| P. M. Jefferson, for soap..... | 7 50 |
| Richardson Ice Co., for ice..... | 15 00 |

Amounts carried forward..... \$1,454 13 \$46,748 24

Amounts brought forward..... \$1,454 13 \$46,748 24

Paid for SUNDRIES :

| | | |
|----|--|-------|
| To | G. J. & D. Bradt, for crackers..... | 80 00 |
| | S. A. Scripture, for crackers..... | 33 00 |
| | C. B. Coburn & Co., for paint, glass, putty, glue, alum, kalsomine, sponge, ammonia, hose, couplings, brushes, etc | 19 84 |
| | W. T. Bradley, for oil cloth..... | 15 00 |
| | Fiske & Spalding, for lettering closets.. | 2 20 |
| | French & Puffer, for spittoons..... | 3 00 |
| | Offutt & Whittaker, for cuspadores and coffee-pot..... | 1 30 |
| | Brace & Lathrop, for insect powder.... | 8 00 |
| | C. W. Lerner & Co., for disinfectant and purifying powder..... | 20 96 |
| | J. A. Brabrook, for handles on clubs... | 75 |
| | Bachelor, Dumas & Co., for blank books, etc..... | 24 25 |
| | Leonard Brown, for envelopes, paper and printing..... | 7 25 |
| | F. P. Coggeshall, for Lippincott's Ga- zetteer..... | 10 00 |
| | H. C. Church, for stationery, etc..... | 48 18 |
| | J. Merrill & Son, for blank books, sta- tionery, etc..... | 18 30 |
| | Waterbury Button Co., for re-gilding but- tons..... | 23 02 |
| | Alvin Lawrence, for repairing clocks and badge..... | 2 50 |
| | O. A. Richardson, for keys, repairing lock, etc..... | 3 00 |
| | James Barris, for slice bar..... | 1 50 |
| | Richard Dobbins, for castings..... | 22 26 |
| | Burditt & Williams, for padlocks and keys..... | 25 00 |
| | Rogers, Taylor & Co., for hardware.... | 4 23 |
| | H. B. Shattuck, for hardware..... | 64 |
| | Rice & Co., for wire cloth..... | 99 |
| | Frederick Taylor, for lock, keys, etc.... | 4 80 |
| | S. G. Mack & Co., for zinc and labor... | 97 |
| | John Gilchrist, for fusel plug..... | 50 |
| | J. D. Parker, for tea, sugar and matches..... | 17 34 |
| | A. C. Wright & Co., for tea, sugar, and matches..... | 3 65 |
| | F. B. Wright, matches..... | 1 20 |

Amounts carried forward..... \$1,857 76 \$46,748 24

Amounts brought forward..... \$1,857 76 \$46,748 24

Paid for SUNDRIES :

| | | |
|--|--------|-------------------|
| To S. D. Butterworth for, mason work and material..... | 13 00 | |
| Matthias Hutchins, for watering street.. | 6 75 | |
| Philip Connors, for cement and gravel.. | 2 50 | |
| James Cowell, for labor with team..... | 2 50 | |
| H. O. Morse, for carriage hire..... | 1 00 | |
| G. W. Norris, for carriage hire..... | 7 00 | |
| Whithed & Co., for coal..... | 196 52 | |
| Lowell Gas Light Co. for gas..... | 601 16 | |
| | <hr/> | 2,688 19 |
| Whole expenditure for the year..... | | <hr/> \$49,436 43 |
| Balance undrawn January 1, 1880..... | | 1,126 41 |
| | | <hr/> |
| | | \$50,562 84 |
| | | <hr/> |

FIRE DEPARTMENT.

| | | |
|--|----|-------------|
| Balance undrawn January 1, 1879..... | \$ | 997 61 |
| Appropriated and assessed in 1879..... | | 48,000 00 |
| | | \$48,997 61 |

RECEIPTS.

Received into the Treasury on account of
FIRE DEPARTMENT:

| | | |
|--|----|-------------|
| From Appropriation for School Houses, for labor..... | \$ | 8 75 |
| Appropriation for Paupers, for manure, etc..... | | 169 84 |
| Appropriation for Police, for labor.... | | 3 00 |
| Appropriation for Sewers and Drains, for use of hose..... | | 50 00 |
| Appropriation for Lighting, for labor.. | | 7 85 |
| Appropriation for Water Works, for labor, lumber, etc..... | | 422 85 |
| Town of Ipswich, for hose carriage.... | | 150 00 |
| Lowell Bleachery, for labor..... | | 6 00 |
| A. L. Brooks & Co., for labor..... | | 10 00 |
| R. F. Britton, for old material..... | | 4 00 |
| Benj. G. Brown, for horse and harness. | | 112 50 |
| Geo. A. Graves, for badge..... | | 5 00 |
| T. R. Garity, for labor..... | | 3 00 |
| L. G. Howe, for old plank..... | | 3 00 |
| F. M. Merrill, for ladders..... | | 4 00 |
| John O'Hearn, for labor..... | | 3 00 |
| A. Thompson, for labor..... | | 5 00 |
| S. W. Taylor, for old material..... | | 88 46 |
| Geo. B. Whitney, for stove..... | | 5 00 |
| | | \$1,061 25 |
| | | \$50,058 86 |
| Transferred from Corporation Tax Account.. | | 12,975 93 |
| Transferred from National Bank Tax Account | | 3,558 48 |
| | | \$66,593 27 |

EXPENDITURES.

Paid CHIEF ENGINEER AND ASSISTANT ENGINEERS :

| | | |
|--|----------|----------|
| To Samuel W. Taylor, Chief Engineer | \$425 00 | |
| Ruel F. Britton, Chief Engineer | 800 00 | |
| Hiram N. Hall, 1st Assistant Engineer and Clerk | 175 00 | |
| Edward S. Hosmer, Assistant Engineer | 125 00 | |
| Ruel F. Britton, Assistant Engineer | 62 50 | |
| James F. Norton, Assistant Engineer . . . | 125 00 | |
| Joseph W. White, Assistant Engineer . . | 62 50 | |
| | <hr/> | 1,775 00 |

Paid for SERVICES OF DRIVERS
AND STEWARDS :

| | | |
|-------------------------------|----------|----------|
| To George Teel | \$708 00 | |
| Henry Boynton | 754 00 | |
| George B. Whitney | 742 00 | |
| Edwin J. Little | 754 00 | |
| Jeremiah Harrington | 742 00 | |
| William L. Peabody | 742 00 | |
| William H. Meloy | 380 00 | |
| H. J. Foster | 315 00 | |
| J. A. Pierce | 266 00 | |
| C. A. Lord | 148 00 | |
| T. J. Farrell | 110 00 | |
| George E. Howe | 79 00 | |
| James Cowell | 46 00 | |
| John Ward | 40 00 | |
| William H. Grady | 20 00 | |
| William King | 20 00 | |
| James Boynton | 20 00 | |
| | <hr/> | 5,886 00 |

Paid for SERVICES OF FIREMEN :

| | | |
|---|-------------|-----------|
| To Members of the several companies for annual pay to November 1, 1879 | \$11,095 74 | |
| | <hr/> | 11,095 74 |

Paid for HAY, GRAIN, ETC. :

| | | |
|--|----------|-------------|
| To Appropriation for Paupers, for hay and straw | \$327 91 | |
| J. B. Cover & Co., for hay and straw . . | 31 82 | |
| W. P. Foye, for hay and straw | 25 20 | |
| | <hr/> | |
| Amounts carried forward | \$384 93 | \$18,756 74 |

Amounts brought forward..... \$384 93 \$18,756 74

Paid for HAY, GRAIN, ETC. :

| | | |
|--|--------|----------------|
| To W. P. Foye & Co., for hay and straw... | 11 04 | |
| Foye & Murphy, for oats | 18 24 | |
| Hall & Peabody, for hay and oats | 88 31 | |
| Knapp Bros., for carrots..... | 58 13 | |
| Wm. E. Livingston, for oats, meal and shorts..... | 223 95 | |
| J. I. Murch, for hay and oats | 96 56 | |
| W. S. Parker, for straw..... | 12 87 | |
| Stiles, Rogers & Co., for hay, oats, meal, shorts and straw..... | 114 83 | |
| A. Trull, for straw..... | 12 18 | |
| L. T. Trull, for hay and straw..... | 45 08 | |
| J. W. Thissell, for hay..... | 10 80 | |
| Wm. H. Wiggin, for hay | 11 33 | |
| S. N. Wood & Son, for hay, oats, shorts, and salt..... | 155 35 | |
| | | <hr/> 1,243 80 |

Paid for HORSES, CARRIAGES, HAR-
NESSES, ETC. :

| | | |
|--|------------|-------------|
| To G. S. Butters, for horses..... | \$ 765 00 | |
| E. J. Noyes, for horse and difference in exchange of horses..... | 465 00 | |
| J. L. Noyes, for difference in exchange of horses..... | 150 00 | |
| Richardson Ice Co., for horses..... | 625 00 | |
| Robert Barris, for harnesses and repairing harnesses..... | 142 40 | |
| J. A. Brabrook, for repairing harnesses, etc..... | 52 64 | |
| T. M. Bolton & Co., for harnesses and repairing harnesses..... | 195 84 | |
| S. L. Butman, for repairing harnesses.. | 7 00 | |
| D. McKee, for whip, brush and surcingle | 3 10 | |
| Sawyer & Taylor, for repairing harnesses, etc..... | 81 40 | |
| A. H. Abbott, for repairing carriages.. | 21 55 | |
| R. F. Britton, for cash paid for repairing carriage..... | 16 20 | |
| James Barris, for repairing carriages, etc | 31 30 | |
| G. L. Cady, for repairing steamer, etc.. | 33 33 | |
| | | <hr/> |
| <i>Amounts carried forward</i> | \$2,589 76 | \$20,000 34 |

Amounts brought forward..... \$2,589 76 \$20,000 34

Paid for HORSES, CARRIAGES, HAR-
NESSES, ETC.:

| | | |
|---|----------|----------|
| To S. & G. H. Convers, for repairing car- riages..... | 186 23 | |
| Dexter Bros. for repairing carriages, etc. | 7 00 | |
| G. F. Hill, for repairing carriages..... | 13 00 | |
| G. W. Hobart, for sleigh and labor..... | 63 50 | |
| Louis Laflam, for varnishing carriage... | 26 00 | |
| M. Meaney, for carriage covers, blocks, hooks, etc..... | 8 05 | |
| Manchester Locomotive Works, for three hose carriages..... | 1,746 50 | |
| Manchester Locomotive Works, for pipe and crank boxes..... | 48 75 | |
| Nashua & Lowell R. R., for freight on hose carriage..... | 3 50 | |
| D. E. Owen & Co., for hitches..... | 23 00 | |
| C. A. Ross & Co., for repairing car- riages, blacksmithing, etc..... | 49 86 | |
| Swett & Robbins, for repairing carriages, etc..... | 122 70 | |
| D. H. Wilson & Co., for repairing steamer and hose carriage..... | 15 85 | |
| Geo. H. Wight, for repairing carriages, etc..... | 7 05 | |
| Charles E. Adams, for hose carriage lamps..... | 58 00 | |
| M. G. Hallett, for engraving plate for hook and ladder carriage..... | 1 25 | |
| Warren Clifford, for cleaning blankets.. | 3 20 | |
| C. F. Blanchard, for medicine for horses | 3 42 | |
| C. R. Kimball, for medicine for horses.. | 3 50 | |
| Robert Wood, for medical treatment of horses | 40 00 | |
| J. P. Scollay, for harness dressing, etc. | 4 25 | |
| | | 5,024 37 |

Paid for ALTERATIONS AND RE-
PAIRS OF BUILDING ON MID-
DLE STREET:

| | |
|---|------------|
| To Sundry persons, for labor as per pay- roll..... | \$1,077 95 |
| Appropriation for School Houses, for lumber, paint, oil and glass..... | 118 68 |

Amounts carried forward..... \$1,196 63 \$25,024 71

Amounts brought forward..... \$1,196 63 \$25,024 71

Paid for ALTERATIONS AND RE-
PAIRS OF BUILDINGS ON MID-
DLE STREET:

| | | |
|---|--------|-------------|
| To Appropriation for Repairs of Public Build- ings, for labor..... | 24 00 | |
| A. L. Brooks & Co., for lumber..... | 14 97 | |
| Howes & Burnham for lumber..... | 297 87 | |
| M. C. Pratt & Co., for lumber and labor | 148 03 | |
| Griffin & Lake, for posts, rails, balus- ters, caps, etc..... | 46 56 | |
| A. Keddie, for sawing lumber..... | 18 65 | |
| J. G. Peabody & Sons, for doors and sash | 41 70 | |
| H. Whitney & Co., for lumber..... | 268 16 | |
| Whitney & Tibbetts, for lumber..... | 121 72 | |
| Frederick Frye, for building hose tower | 587 37 | |
| S. H. Weaver & Son, for roofing..... | 249 00 | |
| American Bolt Company, for bolts and grates..... | 44 58 | |
| A. W. Butcher, for iron..... | 59 | |
| Barris & Co., for bolts, washers, brackets and labor..... | 7 61 | |
| George L. Cady, for hooks, eyes, wire and labor..... | 4 41 | |
| Cole & Nichols, for eastings..... | 2 70 | |
| T. R. Garity, for pipe, fixtures, labor, ete | 715 23 | |
| S. G. Mack & Co., for gutters, grooves, troughs, labor, etc..... | 226 27 | |
| H. B. Shattneck, for hardware | 15 09 | |
| Rogers, Taylor & Co., for hardware.... | 43 | |
| Frederick Taylor, for hardware..... | 119 95 | |
| Sweatt & Davis, for stone..... | 6 25 | |
| B. G. Brown, for pipe, labor, ete..... | 308 35 | |
| C. B. Coburn & Co., for varnish, brushes, etc..... | 9 96 | |
| L. G. Howe, for cash paid for labor.... | 2 90 | |
| C. L. Knapp & Son, for advertising,... | 3 75 | |
| Marden & Rowell, for advertising..... | 3 75 | |
| Morning Times, for advertising..... | 3 00 | |
| | | 4,489 48 |
| <i>Amount carried forward</i> | | \$29,514 19 |

Amount brought forward..... \$29,514 19

Paid for LAND AND REPAIRS
OF BUILDING ON CENTRAL
STREET:

| | | |
|---|------------|----------|
| To Sundry persons, for labor as per pay-roll | \$ 737 27. | |
| Appropriation for School Houses, for lumber and paint..... | 16 10 | |
| Mary Hill, for right of dower in lot of land and building..... | 1,000 00 | |
| A. L. Brooks & Co., for lumber..... | 162 82 | |
| Davis & Sargent, for lumber,..... | 144 45 | |
| Howes & Burnham, for lumber..... | 82 03 | |
| Griffin & Lake, for posts, rails, balus- ters, labor, etc..... | 29 30 | |
| William Kelley, for windows blinds, etc. | 28 80 | |
| M. C. Pratt & Co., for lumber, mould- ing, doors, etc..... | 31 57 | |
| J. G. Peabody & Sons, for doors and sash..... | 33 79 | |
| Whitney & Tibbets, for lumber..... | 154 48 | |
| American Bolt Co., for grates, bolts and rods..... | 16 70 | |
| T. Costello & Co., for water fixtures, plumbing, etc..... | 181 49 | |
| H. A. Fielding, for hardware..... | 65 36 | |
| T. R. Garity, for pipe, fittings, labor, etc..... | 72 87 | |
| F. M. Merrill, for mason work and ma- terial..... | 266 25 | |
| D. M. Prescott & Co., for mason work and material..... | 104 76 | |
| Sweatt & Davis, for stone..... | 1 00 | |
| J. E. Richardson, for stone..... | 6 75 | |
| C. B. Coburn & Co., for paint, glass and shellac..... | 7 91 | |
| Luther Richards, for moving building.. | 40 00 | |
| James Leach, for labor with team..... | 50 | |
| James C. Little, for labor with team.... | 50 | |
| | <hr/> | 3,184 70 |

Paid for LAND AND BUILDING ON
FOURTH STREET:

| | | |
|--|------------|-------------|
| To Hugh Green, for 10,232 feet of land on River street, for location of school house removed from Fourth street..... | \$1,227 84 | |
| <i>Amounts carried forward</i> | \$1,227 84 | \$32,698 89 |

Amounts brought forward..... \$1,227 84 \$32,698 89

Paid for LAND AND BUILDING ON
FOURTH STREET:

| | | |
|---|----------|-----------|
| To B. G. Brown, for excavating and building cellar wall on River street..... | 146 00 | |
| Luther Richards, for removing school house from Fourth street to River street | 165 00 | |
| D. M. Prescott & Co., for mason work and material..... | 181 00 | |
| A. L. Brooks & Co., for lumber..... | 74 40 | |
| American Bolt Co., for bolts..... | 2 70 | |
| Cyrus P. Barclay, for labor and material on account of contract..... | 7,000 00 | |
| O. A. Simpson, for drain pipe and labor. | 91 26 | |
| E. L. Trask, for lettered stone..... | 25 00 | |
| Sweatt & Davis, for window caps..... | 10 50 | |
| | | *8,923 70 |

Paid for SUNDRIES:

| | |
|---|-----------|
| To Appropriation for Schools, for rent of rooms on Fourth street.....\$ | 75 00 |
| Appropriation for School Houses, for lumber, paint, and labor..... | 88 28 |
| Appropriation for Roads and Bridges, for services of City Engineer..... | 55 62 |
| Appropriation for Roads and Bridges, for fuel, labor, etc..... | 576 54 |
| Appropriation for Repairs of Public Buildings, for lumber, paint, and labor.... | 59 61 |
| Appropriation for Water Works, for use of water, etc..... | 13,514 28 |
| Reserved Fund, for coal..... | 75 36 |
| Sundry persons, for labor as per pay-roll | 307 48 |
| Whithed & Co., for coal..... | 169 03 |
| A. L. Brooks & Co., for lumber..... | 275 86 |
| Brady & Healey, for labor on lumber... | 2 25 |
| Davis & Sargent, for lumber..... | 44 16 |
| Griffin & Lake, for rolls and ladder rounds..... | 3 85 |
| Howes & Burnham, for lumber..... | 95 83 |
| Keddie & Curtise, for patterns, etc.... | 10 00 |
| William Kelley, for sash and door..... | 9 75 |
| William Kelley & Son, for glazing, etc.. | 6 00 |

Amounts carried forward..... \$15,368 90 \$41,622 59

*To this amount add \$1,787.55, charged to the Appropriation for Repairs of Public Buildings, on account of Ward Room, making total cost of land and building, \$10,711.25.

Amounts brought forward..... \$15,368 90 \$41,622 59

Paid for SUNDRIES :

| | |
|---|--------|
| To J. G. Peabody & Sons, for doors and sash | 37 95 |
| M. C. Pratt & Co., for lumber..... | 92 08 |
| C. B. Stevens, for stairs..... | 31 00 |
| H. Whitney & Co., for lumber..... | 10 27 |
| Whitney & Tibbetts, for lumber..... | 39 27 |
| Charles E. Adams, for hardware, lanterns, etc..... | 79 88 |
| John C. Bennett, for hardware..... | 12 18 |
| T. H. Curtis for keys..... | 1 80 |
| H. A. Fielding, for hardware..... | 3 23 |
| Rogers, Taylor & Co., for hardware.... | 22 01 |
| Horace B. Shattuck, for hardware..... | 13 90 |
| Frederick Taylor, for hardware..... | 74 91 |
| American Bolt Co., for rods, bolts, and grates..... | 28 86 |
| A. W. Butcher, for iron..... | 7 58 |
| James Barris, for drills, labor, etc..... | 17 65 |
| Cole & Nichols, for castings..... | 12 26 |
| Pevey Bros., for castings..... | 9 79 |
| D. Blackington, for iron, patterns, and labor..... | 63 13 |
| George L. Cady, for wire and labor..... | 1 75 |
| T. Costello & Co., for pipe, fixtures, plumbing, etc..... | 317 89 |
| Richard Dobbins, for bolts, labor, etc.... | 10 38 |
| T. R. Garity, for pipe, fittings, labor, etc | 196 46 |
| John Gilchrist, for gas fixtures and globes | 24 00 |
| G. L. Huntoon, for repairing gong..... | 5 00 |
| S. G. Mack & Co., for pipe, zinc, pails, labor, etc..... | 62 29 |
| A. Parsons, for blacksmithing..... | 4 35 |
| F. W. Proctor, for pipe, valves, and labor..... | 28 37 |
| O. A. Richardson, for repairing lock.... | 1 25 |
| Rice & Co., for wire cloth and screens.. | 46 08 |
| N. J. Wier & Co., for watering-pot, labor, etc..... | 6 98 |
| H. H. Wilder & Co., for castings, lead, lanterns, burner, labor, etc..... | 65 73 |
| Merrimack Mfg. Co., for electric magnets | 15 00 |
| Pierce & Griswold, for fire alarm indicators..... | 500 00 |

Amounts carried forward..... \$17,212 18 \$41,622 59

Amounts brought forward.....\$17,212 18 \$41,622 59

Paid for SUNDRIES :

| | |
|---|----------|
| To Moses T. Crane & Co., for kerite, wire, insulators, hangers, pliers, and signal boxes | 755 38 |
| J. W. Stover, for kerite and wire..... | 23 25 |
| W. C. Stoddard, for 2 "Champion Extinguishers,"..... | 90 00 |
| Leonard Brown & Co., for fire alarm eards | 15 00 |
| Huse, Goodwin & Co., for fire alarm cards | 6 00 |
| C. L. Knapp & Son, for printing..... | 2 50 |
| Lowell Morning Times, for printing.... | 11 00 |
| Marden & Rowell, for printing..... | 2 00 |
| Stone, Bacheller & Livingston, for printing | 21 10 |
| M. A. Shaw, for cash paid for printing. | 1 75 |
| F. P. Coggeshall, for books and stationery | 2 10 |
| F. P. Coggeshall & Son, for blank books and stationery..... | 6 00 |
| Marston & Prince, for blank books..... | 1 25 |
| J. Merrill & Son, for paper and ink.... | 45 |
| James Boyd & Son, for pipe, bottles and pole snaps..... | 27 00 |
| James Boyd & Son, for 550 feet of cotton hose..... | 500 00 |
| B. F. Goodrich & Co., for 500 feet of "Akron" hose..... | 437 50 |
| Josiah Gates & Sons, for 1,011 feet of leather hose, hose-pipes, nozzles, repairing hose, etc..... | 1,003 10 |
| C. B. Coburn & Co., for varnish, japan, shellac, sponge, buckskin, hose, waste, rope, paeking, brooms, glass, etc.... | 117 25 |
| H. C. Church, for waste..... | 4 94 |
| W. D. Cole, for hose stuffing and ean... | 7 00 |
| F. H. Chandler, for rent of house for hose-carriage | 130 00 |
| F. H. Chandler, for salt, axle-grease and brooms..... | 5 44 |
| Fiske & Spalding, for shades, paper, cord, labor, etc..... | 38 20 |
| Jonathan Kendall, for oil, shellac, alcohol, glass, brushes, etc..... | 80 19 |

Amounts carried forward.....\$20,500 58 \$41,622 59

Amounts brought forward..... \$20,500 58 \$41,622 59

Paid for SUNDRIES :

| | |
|--|--------|
| To J. R. Hayes, for insect powder..... | 35 |
| French & Puffer, for lamps, burners, chimneys, can, pails, brooms, brushes, etc | 27 92 |
| A. J. Livingston, for soap | 4 80 |
| Wm. E. Livingston, for cement, lime, and sand..... | 5 10 |
| G. P. Palmer, Agent, for oil..... | 3 50 |
| C. P. Talbot & Co., for bi-carbonate of soda and vitriol..... | 177 15 |
| Alvah Walker & Co., for oil..... | 10 04 |
| H. B. Barnes, for glazing..... | 1 75 |
| H. A. Racicot, for painting signs..... | 4 00 |
| Benner Bros., for chairs, mirrors, and cord..... | 34 20 |
| Wm. T. Bradley, for mirror and mat... | 8 37 |
| Marshall, Crosby & Co., for mattresses, pillows, etc | 127 55 |
| Jacob Nichols, for oil cloth..... | 6 82 |
| Offutt & Whittaker, for carpet, mirrors, comforters, etc..... | 41 84 |
| J. F. Puffer & Son, for bed, pillows, oil- cloth and mat..... | 13 25 |
| Tucker Mfg. Co., for iron beds..... | 74 40 |
| H. Hosford & Co. for dry goods, blank- ets, quilts, and comforters..... | 78 64 |
| C. H. Kimball, for badge..... | 5 00 |
| Alvin Lawrence, for clocks..... | 29 00 |
| R. F. Britton, for cash paid for expenses of committee, postage stamps, tele- grams, castings, travelling expenses, etc | 64 40 |
| S. W. Taylor, for cash paid for expenses of committee, expressing, refresh- ments, labor, etc | 74 70 |
| S. D. Butterworth, for mason work and material..... | 94 35 |
| B. G. Brown, for stone, cement, and labor..... | 139 37 |
| Frederick Frye, for mason work and ma- terial | 1 25 |
| L. Kittredge & Son, for drain pipe, labor and cement..... | 61 98 |
| F. M. Merrill, for labor and material.... | 23 85 |

Amounts carried forward \$21,614 16 \$41,622 59

Amounts brought forward..... \$21,614 16 \$41,622 59

Paid for SUNDRIES :

| | |
|--|--------|
| To E. A. & A. T. Smith, for conerete..... | 289 45 |
| John Stackpole, for earriage jacks..... | 21 50 |
| Edwin Sanborn, for bolts, etc..... | 1 35 |
| Lowell Cornet Band, for services at Fire- men's Parade..... | 50 00 |
| J. V. Drew, for refreshments..... | 6 75 |
| Nichols & Hutehins, for refresments.... | 250 00 |
| White & James, for refreshments..... | 23 70 |
| Ruth Shaw, for making sheets and pil- low cases..... | 8 00 |
| Lowell Distriet Telephone Co., for tele- phone serviee..... | 8 75 |
| Lowell Gas Light Co., for gas and meter connections..... | 306 90 |
| Boston & Maine R. R., for transporta- tion..... | 50 |
| Boston & Lowell R. R., for transporta- tion..... | 1 76 |
| Edward Boyle, for use of horse..... | 14 00 |
| G. S. Butters, for use of horse..... | 10 00 |
| J. E. Conant & Co., for use of horse... | 24 00 |
| Charles G. Fletcher, for use of horse.... | 42 00 |
| Thomas Mooney, for use of horse..... | 5 00 |
| George W. Norris, for use of horse..... | 43 00 |
| Morris Walsh, for use of horse..... | 1 50 |
| George L. Huntoon, for earriage hire... | 10 00 |
| Jeremiah Flagg, for labor..... | 1 00 |
| H. J. Foster, for labor..... | 336 16 |
| D. W. Hillard, for labor..... | 3 00 |
| George E. Howe, for labor..... | 4 00 |
| C. S. Hibbard, for labor..... | 1 50 |
| C. A. Lord, for labor..... | 15 00 |
| James A. Pierree, for labor..... | 18 00 |
| Frank Roark, for labor..... | 54 00 |
| John Ward, for labor..... | 87 00 |
| George B. Whitney, for labor..... | 300 00 |
| Lovejoy & Co.'s Express, for transporta- tion..... : | 2 20 |
| Penniman & Co.'s Express, for trans- portation..... | 8 60 |
| A. Merrill, for teaming..... | 2 00 |
| Daniel McCarty, for teaming..... | 2 00 |
| William Roberts, for teaming..... | 3 50 |
| John Sullivan, for teaming..... | 75 |

Amounts carried forward..... \$23,571 03 \$41,622 59

Amounts brought forward..... \$23,571 03 \$41,622 59

Paid for SUNDRIES :

| | | |
|---|-------|-------------------|
| To Francis S. Smith, for teaming..... | 1 00 | |
| Odorless Excavating Co., for labor..... | 3 50 | |
| | <hr/> | 23,575 53 |
| Whole expenditure for the year.. .. | | <hr/> \$65,198 12 |
| Balance undrawn January 1, 1880..... | | 1,395 15 |
| | | <hr/> |
| | | <hr/> \$66,593 27 |

SEWERS AND DRAINS.

| | | |
|--|----|-------------|
| Balance undrawn January 1, 1879..... | \$ | 614 81 |
| Appropriated and assessed in 1879..... | | 56,000 00 |
| | | \$56,614 81 |

RECEIPTS.

Received into the Treasury on account of
SEWERS and DRAINS:

IN JANUARY.

| | | |
|--|----|-------------|
| From James P. Mulcahey, for sewer assessment, Adams street..... | \$ | 71 16 |
| Thomas Wilson, for sewer assessment, Hale and Cambridge streets..... | | 227 37 |
| Amos B. Hayward, for sewer assessment, Coral street.... | | 26 98 |
| Anu McKinnon, for sewer assessment, South street..... | | 13 22 |
| Solomon K. Dexter, for sewer assessment, Wilder street..... | | 41 16 |
| Orrin B. Ranlett, for sewer assessment, Wilder street | | 30 05 |
| Orrin B. Ranlett, for sewer assessment, Princeton street..... | | 15 44 |
| Fanny Fisher, for sewer assessment, Wilder street..... | | 17 98 |
| Samuel Hoar, for sewer assessment, Wilder street..... | | 22 10 |
| David Healey, for sewer assessment, Princeton street..... | | 29 88 |
| Oblate Fathers Society, for sewer assessment, Staekpole street..... | | 46 47 |
| <i>Amounts carried forward.....</i> | | \$541 81 |
| | | \$56,614 81 |

Amounts brought forward..... \$541 81 \$56,614 81

Received into the Treasury on account of
SEWERS and DRAINS:

IN JANUARY.

| | |
|--|-------|
| From Valentine L. Wilson, for sewer assessment, Wilder street..... | 27 98 |
| Samuel T. Brown, for sewer assessment, Third street..... | 29 51 |
| Josiah Grover, for sewer assessment, Third street..... | 23 02 |
| Selden L. Sawtell, for sewer assessment Franklin street..... | 38 42 |
| Manlius Knowles, for sewer assessment, Franklin street..... | 53 40 |
| Mrs. J. L. Sawtell, for sewer assessment, Franklin street..... | 47 96 |
| Ira H. Plaisted, for sewer assessment, Franklin street..... | 29 26 |
| Ira H. Plaisted, for sewer assessment, Franklin street..... | 44 35 |
| Heirs of Wm. C. Dudley, for sewer assessment, Franklin street..... | 57 18 |
| Alfred Nourbourne, for sewer assessment, Franklin street..... | 63 30 |
| John F. Manahan, for sewer assessment, Franklin street..... | 32 80 |
| Gardner W. King, for sewer assessment, Westford street..... | 41 33 |
| Rozilla Paulint, for sewer assessment, Westford street..... | 31 70 |
| Paul Otis, for sewer assessment, Westford street..... | 55 62 |
| Cyrus P. Barclay, for sewer assessment, Westford street..... | 38 28 |
| John J. Whiteley, for sewer assessment, Cambridge street..... | 48 20 |
| Patrick Stanton, for sewer assessment, Newhall street..... | 51 60 |
| John Yore, for sewer assessment, Newhall street..... | 14 94 |
| Olive Chase, for sewer assessment, Marshall street..... | 15 38 |
| Margaret Mill, for sewer assessment, Marshall street..... | 42 25 |

Amounts carried forward..... \$1,328 29 \$56,614 81

Amounts brought forward..... \$1,328 29 \$56,614 81

Received into the Treasury on account of
SEWERS AND DRAINS: .

IN JANUARY.

| | | |
|---|--------|----------|
| From Hugh Butterworth, for sewer assessment, Marshall street..... | 18 64 | |
| Mary B. Wiggin, for sewer assessment, Marshall street..... | 14 90 | |
| Wm. T. Willis, for sewer assessment Dover street..... | 14 72 | |
| Laura W. Pearson, for sewer assessment, Myrtle street..... | 23 62 | |
| James Carr, for sewer assessment, Lawrence street..... | 15 02 | |
| Jane Cowen, for sewer assessment, Lawrence street..... | 10 90 | |
| A. R. Richardson, for sewer assessment, Branch street..... | 80 20 | |
| George W. Pearson, for sewer assessment, Wilder street..... | 15 97 | |
| N. T. Staples & Sons, for cement.... | 232 80 | |
| | | 1,755 06 |

IN FEBRUARY.

| | | |
|--|----------|-------------|
| From Addison Putnam, for sewer assessment, Nesmith street..... | \$104 24 | |
| Fanny Fisher, for sewer assessment, Middlesex street..... | 33 87 | |
| Hugh Morrison, for sewer assessment, Middlesex street..... | 26 21 | |
| Samuel W. Foster, for sewer assessment, Wilder street..... | 25 85 | |
| James R. Miller, for sewer assessment, Wilder street..... | 21 18 | |
| John A. Denton, for sewer assessment Wilder street..... | 14 05 | |
| Gerry Wilson, for sewer assessment, Third street..... | 16 48 | |
| Trustees of Estate of Isaac Place, for sewer assessment, Franklin street.. | 65 75 | |
| Trustees of Estate of Isaac Place, for sewer assessment, Franklin street.. | 94 00 | |
| Thomas E. Ward, for sewer assessment, Fletcher street..... | 40 54 | |
| <i>Amounts carried forward</i> | \$442 17 | \$58,369 87 |

Amounts brought forward..... \$442 17 \$58,369 87

Received into the Treasury on account of
SEWERS and DRAINS:

IN FEBRUARY.

| | |
|--|--------|
| From Daniel Caverly, for sewer assessment, Westford street..... | 38 66 |
| James H. Abbott, for sewer assessment, Westford street..... | 124 66 |
| Absalom Parsons, for sewer assess- ment, Westford street..... | 37 49 |
| Samuel H. Merrill, for sewer assess- ment, Westford street..... | 33 56 |
| Alvin Beard, for sewer assessment, Westford street..... | 28 55 |
| Christina Goodspeed, for sewer assess- ment, Westford street..... | 28 50 |
| Newell Abare, for sewer assessment, Cambridge street..... | 35 02 |
| H. A. & S. A. Coburn, for sewer as- sessment, Cambridge street..... | 29 65 |
| Thomas J. Ryden, for sewer assess- ment, Newhall street..... | 12 21 |
| Henry H. Noyes, for sewer assessment, Newhall street..... | 12 21 |
| Wamesit Power Co., for sewer assess- ment, Newhall street..... | 36 11 |
| John Laflamme, for sewer assessment, McIntire street..... | 6 92 |
| John Laflamme, Jr., for sewer assess- ment, McIntire street..... | 5 57 |
| Thomas H. West, for sewer assessment, McIntire street..... | 5 67 |
| John Kidder, for sewer assessment, McIntire street..... | 13 69 |
| John H. Burns, for sewer assessment, McIntire street..... | 7 47 |
| E. G. Sanborn, for sewer assessment, Marshall street..... | 19 91 |
| Sarah E. Bentley, for sewer assessment, Marshall street..... | 32 64 |
| Luther Blodgett, for sewer assessment, Marshall street..... | 31 57 |
| Samuel G. Davis, for sewer assessment, Branch street..... | 64 52 |

Amounts carried forward..... \$1,046 75 \$58,369 87

Amounts brought forward..... \$1,046 75 \$58,369 87

Received into the Treasury on account of
SEWERS AND DRAINS:

IN FEBRUARY.

| | | |
|---|-------|----------|
| From Thomas Barnes, for sewer assssment, Floyd street..... | 18 54 | |
| | <hr/> | 1,065 29 |

IN MARCH.

| | | |
|--|----------------|-------------------|
| From Frank Hyde, for sewer assessment, Butterfield street..... | \$22 88 | |
| John Boyle, for sewer assessment, South street..... | 16 38 | |
| Joshua T. Willis, for sewer assessment, Wilder street..... | 34 04 | |
| Elizabeth H. Lake, for sewer assess- ment, Wilder street..... | 30 10 | |
| Alonzo A. Coburn, for sewer assess- ment, Wilder street..... | 15 18 | |
| Robert G. Bartlett, for sewer assess- ment, Wilder street..... | 23 98 | |
| Robert G. Bartlett, for sewer assess- ment, Wilder street..... | 20 65 | |
| Daniel W. Barth, for sewer assessment, Third street..... | 35 33 | |
| Estate of Chester W. Rugg, for sewer assessment, Third street..... | 35 42 | |
| Benjamin F. Simpson, for sewer assess- ment, Third street..... | 55 62 | |
| Newell A. Ranlett, for sewer assess- ment, Third street..... | 19 02 | |
| Wm. H. Anderson, for sewer assess- ment, Fletcher street..... | 34 07 | |
| James M. Moore, for sewer assessment, Westford street..... | 31 50 | |
| Thomas Gibson, for sewer assessment, Westford street..... | 34 52 | |
| Francis Carll, for sewer assessment, Westford street..... | 150 60 | |
| Francis Carll, for sewer assessment, Westford street..... | 38 50 | |
| Francis & Silas Carll, for sewer assess- ment, Westford street..... | 68 79 | |
| John A. Denton, for sewer assessment, Westford street..... | 50 18 | |
| <i>Amounts carried forward</i> | <hr/> \$716 76 | <hr/> \$59,435 16 |

Amounts brought forward..... \$716 76 \$59,435 16

Received into the Treasury on account of
SEWERS AND DRAINS:

IN MARCH.

| | |
|--|-------|
| From Alonzo J. Page, for sewer assessment, Westford street..... | 44 71 |
| Stanchfield & Lawrence, for sewer assessment, Westford street..... | 38 08 |
| Edward Hoole, for sewer assessment, Westford street..... | 41 78 |
| James D. Sullivan, for sewer assessment, Fenwick street..... | 15 29 |
| Patrick J. Devine, for sewer assessment, Newhall street..... | 35 12 |
| James E. Webster, for sewer assessment, Marshall street..... | 46 52 |
| Harry Meserve, for sewer assessment, Marshall street..... | 28 33 |
| M. C. Pratt & Co., for sewer assessment, Westford street..... | 56 28 |
| James M. Moore, for sewer assessment, Dover street..... | 20 68 |
| A. Churchill & Lydia Green, for sewer assessment, Dover street..... | 30 84 |
| Emma H. Mills, for sewer assessment, Dover street..... | 18 40 |
| Ferdinand Rodliff, Jr., for sewer assessment, Dover street..... | 17 88 |
| Lavina Wright, for sewer assessment, Dover street..... | 18 39 |
| Ruel F. Britton, for sewer assessment, Dover street..... | 18 39 |
| George A. Hood, for sewer assessment, Dover street..... | 18 39 |
| Charles Swan, for sewer assessment, Dover street..... | 25 02 |
| A. L. Russell, for sewer assessment, Dover street..... | 25 57 |
| Horace Parmenter, for sewer assessment, Dover street..... | 22 07 |
| John M. G. Parker, for sewer assessment, Myrtle street..... | 63 72 |
| William French, for sewer assessment, Myrtle street..... | 80 32 |

Amounts carried forward..... \$1,382 54 \$59,435 16

Amounts brought forward..... \$1,382 54 \$59,435 16

Received into the Treasury on account of
SEWERS AND DRAINS:

IN MARCH.

| | | |
|--|----|----------|
| From James Dailey, for sewer assessment, | | |
| Lawrence street..... | 12 | 05 |
| Thomas Knowles, for sewer assessment, | | |
| Lawrence street..... | 17 | 67 |
| Francis Conroy, for sewer assessment, | | |
| Lawrence street..... | 17 | 89 |
| Patrick Heeren, for sewer assessment, | | |
| Lawrence street..... | 17 | 88 |
| Margaret Welch, for sewer assessment, | | |
| Lawrence street..... | 21 | 42 |
| Michael Cleary, for sewer assessments, | | |
| Lawrence street..... | 16 | 39 |
| Michael Green, for sewer assessment, | | |
| Lawrence street..... | 10 | 73 |
| Michael Crowley, for sewer assessment, | | |
| Lawrence street..... | 13 | 20 |
| Charles W. Wilder, for sewer assess- | | |
| ment, Wilder street..... | 36 | 98 |
| Albert F. Nichols, for sewer assess- | | |
| ment, Wilder street..... | 38 | 70 |
| | | |
| | | 1,585 45 |

IN APRIL.

| | | |
|---|----------|-------------|
| From Levi Ferguson, for sewer assessment, | | |
| Stackpole street..... | \$ | 17 53 |
| E. A. Hill, for sewer assessment, Wil- | | |
| der street..... | 25 | 68 |
| E. A. Hill, for sewer assessment, West- | | |
| ford street..... | 242 | 45 |
| E. A. Hill, for sewer assessment, West- | | |
| ford street..... | 38 | 67 |
| William H. Wiggin, for sewer assess- | | |
| ment, Franklin street..... | 46 | 83 |
| Heirs of James Walkden, for sewer as- | | |
| sessment, Franklin street..... | 44 | 65 |
| Crosby Furniture Co., for sewer assess- | | |
| ment, Franklin and Fletcher streets | 90 | 00 |
| C. S. Bean, for sewer assessment, | | |
| Fletcher street..... | 58 | 28 |
| Josiah Gates, for sewer assessment, | | |
| Franklin street..... | 43 | 00 |
| | | |
| <i>Amounts carried forward</i> | \$607 09 | \$61,020 61 |

Amounts brought forward..... \$607 09 \$61,020 61

Received into the Treasury on account of
SEWERS AND DRAINS:

IN APRIL.

| | | |
|--|--------|----------|
| From Abel E. Conant, for sewer assessment, Westford street..... | 197 90 | |
| Charles S. Graves, for sewer assess- ment, Westford street..... | 83 09 | |
| Francis T. Wilson, for sewer assess- ment, Dover street..... | 16 56 | |
| Dominick McEvoy, for sewer assess- ment, Lawrence street..... | 10 10 | |
| Patrick Joyce, for sewer assessment Lawrence street..... | 13 25 | |
| Wm. H. Bent, for sewer assessment, Branch street..... | 18 10 | |
| James G. Buttrick, for sewer assess- ment, Wilder street..... | 35 66 | |
| Asa C. Russell, for sewer assessment, Wilder street..... | 32 12 | |
| Albert Smith, for sewer assessment, Wilder street..... | 16 52 | |
| A. M. Austin, for remote drainage.... | 25 00 | |
| Charles T. Fish, for remote drainage.. | 20 00 | |
| | <hr/> | 1,075 39 |

IN MAY.

| | | |
|---|----------|-------------|
| From Robert J. Butcher, for sewer assess- ment, Wilder street..... | \$39 00 | |
| Robert J. Butcher, for sewer assess- ment, Princeton street..... | 35 57 | |
| Frank W. Wheeler, for sewer assess- ment, Wilder street..... | 14 05 | |
| Arthur Staples, for sewer assessment, Franklin street..... | 37 92 | |
| George W. Doty, for sewer assess- ment, Westford street..... | 75 55 | |
| Stephen Cutter, for sewer assessment, Westford street..... | 76 78 | |
| Mary I. Dow, for sewer assessment, Dover street..... | 27 60 | |
| Ellen Hirshfield, for sewer assessment, Dover street..... | 17 38 | |
| Dennis Cleary, for sewer assessment, Lawrence street..... | 17 67 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$341 52 | \$62,096 00 |

Amounts brought forward..... \$341 52 \$62,096 00

Received into the Treasury on account of
SEWERS and DRAINS:

IN MAY.

| | | |
|---|-------|--------|
| George E. Evans, for sewer assessment, Wilder street..... | 24 73 | |
| Benjamin Wilby, for entering sewer, Gorham street..... | 12 08 | |
| E. B. Pateh, for entering sewer, Charles street..... | 15 00 | |
| H. C. & J. F. Howe, for remote drainage, Marshall street..... | 15 00 | |
| | <hr/> | 408 33 |

IN JUNE.

| | | |
|--|---------|--------|
| From Appropriation for Roads and Bridges, for brick..... | \$ 4 20 | |
| Mary Lyons, for entering sewer, Chestnut street..... | 15 00 | |
| B. Delaney, for entering sewer, Charles street..... | 30 00 | |
| Shuar F. Favor, for sewer assessment, Wilder street..... | 26 16 | |
| Annie Tarr, for sewer assessment, Branch street..... | 17 49 | |
| Andrew C. Wheelock, for sewer assessment, Lawrence street..... | 13 25 | |
| Charles F. Warren, for sewer assessment, Westford street..... | 44 96 | |
| Hiram Watson, for sewer assessment, Westford street..... | 32 06 | |
| Elizabeth E. Boyd, for sewer assessment, Staekpole street..... | 5 76 | |
| | <hr/> | 188 88 |

IN JULY.

| | | |
|--|---------|-------------------|
| From Appropriation for Roads and Bridges, for brick..... | \$ 3 50 | |
| T. J. McDuffee, for entering Suffolk street sewer..... | 20 00 | |
| Timothy Sullivan, for sewer assessment, Lawrence street..... | 32 03 | |
| Timothy Sullivan, for sewer assessment, Lawrence street..... | 18 82 | |
| | <hr/> | 74 35 |
| <i>Amount carried forward</i> | | <hr/> \$62,767 56 |

Amount brought forward..... \$62,767 56

Received into the Treasury on account of
SEWERS AND DRAINS:

IN AUGUST.

| | | |
|--|----------|--------|
| From Appropriation for Roads and Bridges, for brick, etc..... | \$ 87 07 | |
| Ayer & Southwick, for remote drainage | 25 00 | |
| Frederic T. Greenhalge, for sewer as- sessment, Wyman street..... | 19 58 | |
| William Parr, for sewer assessment, Lawson street..... | 8 41 | |
| C. B. Stevens, for sewer assessment, Lawson street..... | 8 24 | |
| Samuel G. Davis, for sewer assessment, Dover street..... | 47 95 | |
| E. A. & A. T. Smith, for sewer assess- ment, Wilder street..... | 44 80 | |
| E. A. & A. T. Smith, for sewer assess- ment, Branch and Middlesex streets | 107 50 | |
| Edward Stockman, for sewer assess- ment, Middlesex street..... | 26 84 | |
| Smith Adams, for sewer assessment, Middlesex street..... | 69 24 | |
| John Quinn, for sewer assessment, Westford street..... | 48 78 | |
| Wm. T. Fuller, for sewer assessment Westford street..... | 103 50 | |
| Cornelia S. Boardman, for sewer as- sessment, Third street..... | 104 24 | |
| Convers Nichols, for sewer assessment, Franklin street..... | 70 75 | |
| | <hr/> | 771 90 |

IN SEPTEMBER.

| | | |
|--|----------|-------------|
| From Appropriation for School Houses, for sewer assessment, Dover street..... | \$ 36 08 | |
| Appropriation for Roads and Bridges, for brick, labor, etc..... | 78 80 | |
| French and Carleton Heirs, for labor.. | 2 00 | |
| E. Granville Parker, for sewer assess- ment, Dover street..... | 18 04 | |
| Charles T. Fish, for sewer assessment, Dover street..... | 18 04 | |
| Alfred S. Horn, for sewer assessment, Middlesex street..... | 124 95 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$277 91 | \$63,539 46 |

Amounts brought forward..... \$277 91 \$63,539 46

Received into the Treasury on account of
SEWERS AND DRAINS :

IN SEPTEMBER.

| | | |
|--|-------|--------|
| From Alfred S. Horn, for sewer assessment, Wilder street..... | 70 92 | |
| Heirs of Martin Fitzpatrick, for sewer assessment, Marshall street..... | 25 15 | |
| Patrick Plunkett, for sewer assessment, Fenwick street..... | 24 12 | |
| Laura W. Miner, for sewer assessment, Westford street..... | 51 28 | |
| | <hr/> | 449 38 |

IN OCTOBER.

| | | |
|---|----------|-------------|
| From Appropriation for Roads and Bridges, for labor, etc..... | \$28 35 | |
| Patrick Lynch, for remote drainage,.. | 25 00 | |
| E. P. Sanborn, for remote drainage,.. | 15 00 | |
| H. C. & J. F. Howe, for sewer assess- ment, Fletcher street..... | 43 94 | |
| Mrs. Isaac Daly, for sewer assessment, McIntire street..... | 9 58 | |
| Erastus Winegard, for sewer assess- ment, Dover street..... | 18 04 | |
| James Burns, for sewer assessment, Somerset street..... | 6 44 | |
| John Richards, for sewer assessment, Lawson street..... | 7 98 | |
| John G. Stedman, for sewer assess- ment, Queen street..... | 12 99 | |
| John G. Stedman, for sewer assess- ment, Queen street..... | 10 98 | |
| James C. Abbott, for sewer assessment, Talbot street..... | 28 88 | |
| Aaron Blanchard, for sewer assess- ment, Talbot street..... | 22 69 | |
| Thomas Kane, for sewer assessment, Mill street..... | 13 58 | |
| Mary Brennan, for sewer assessment, Mill street..... | 12 12 | |
| Judson J. Judkins, for sewer assess- ment, Hildreth street..... | 18 65 | |
| Thomas Namack, for sewer assessment, Hildreth street..... | 19 33 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$293 55 | \$63,988 84 |

Amounts brought forward..... \$293 55 \$63,988 84

Received into the Treasury on account of
SEWERS AND DRAINS:

IN OCTOBER.

| | | |
|---|-------|--------|
| From John Caulfield, for sewer assessment, Hildreth street..... | 22 95 | |
| Heirs of John Higgins, for sewer as- sessment, Swift street..... | 9 36 | |
| Heirs of David Dillon, for sewer as- sessment, Swift street..... | 19 15 | |
| | <hr/> | 345 01 |

IN NOVEMBER.

| | | |
|---|----------|-------------|
| From Appropriation for Roads and Bridges, for sundries..... | \$27 68 | |
| David S. Field, for entering sewer.... | 10 00 | |
| John F. Merrill, for sewer assessment, Jewett street..... | 25 45 | |
| Jacob Shepârd, for sewer assessment, Prospect street..... | 6 54 | |
| Bridget Rigney, for sewer assessment, Prospect street..... | 5 60 | |
| John Riley, for sewer assessment, Keene street..... | 8 36 | |
| Mary O'Neil, for sewer assessment, Keene street..... | 23 83 | |
| Charles C. Barnes, for sewer assess- ment, Leroy street..... | 11 89 | |
| Samuel D. Prescott, for sewer assess- ment, Leroy street..... | 11 89 | |
| Luey H. Lewis, for sewer assessment, Leroy street..... | 7 57 | |
| Wm. K. Thompson, for sewer assess- ment, Leroy street..... | 5 95 | |
| Cornelius Monahan, for sewer assess- ment, Coburn street..... | 24 24 | |
| Richard Martin, for sewer assessment, Coburn street..... | 15 90 | |
| Albert N. Harmon, for sewer assess- ment, Hildreth street..... | 23 37 | |
| Elijah F. Paige, for sewer assessment, Nichols street..... | 20 85 | |
| H. A. Whiting & Co., for sewer assess- ment, Queen street..... | 7 85 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$236 97 | \$64,333 85 |

Amounts brought forward..... \$236 97 \$64,333 85

Received into the Treasury on account of
SEWERS AND DRAINS:

IN NOVEMBER.

| | | |
|---|-------|--------|
| From H. A. Whiting & Co., for sewer assessment, Queen street..... | 9 92 | |
| H. A. Whiting & Co., for sewer assessment, Queen street..... | 23 38 | |
| Julius C. Johnson, for sewer assessment, Dover street..... | 18 04 | |
| J. B. York, for sewer assessment, Dover street..... | 18 04 | |
| Charles E. Kimball, for sewer assessment, Dover street..... | 18 04 | |
| Frank L. Morrill, for sewer assessment, Dover street..... | 18 04 | |
| Peter G. Scoboria, for sewer assessment, Dover street..... | 18 04 | |
| Joel G. Merchant, for sewer assessment, Westford street..... | 13 94 | |
| | | 374 41 |

IN DECEMBER.

| | | |
|---|----------|-------------|
| From Sarah Caverly, for sewer assessment, Beech street..... | \$ 15 54 | |
| David G. Skillings, for sewer assessment, Beech street..... | 26 42 | |
| George W. Sanborn, for sewer assessment, Beech street..... | 14 09 | |
| Benjamin F. Butler, for sewer assessment, Agawam street..... | 74 55 | ✓ |
| Estate of Wm. P. Webster, for sewer assessment, Sixth street..... | 22 91 | |
| Estate of Fisher A. Hildreth, for sewer assessment, Sixth street..... | 22 91 | |
| Jane Butler, for sewer assessment, Jewett street..... | 30 78 | ✓ |
| John B. Brown, for sewer assessment, Jewett street..... | 25 45 | |
| George Wilkins, for sewer assessment, Walker street..... | 95 33 | |
| Charles F. Varnum, for sewer assessment, Walker street..... | 31 85 | |
| George A. Roper, for sewer assessment, Walker street..... | 31 85 | |
| <i>Amounts carried forward</i> | \$391 68 | \$64,708 26 |

Amounts brought forward..... \$391 68 \$64,708 26.

Received into the Treasury on account of
SEWERS AND DRAINS:

IN DECEMBER.

| | |
|---|--------|
| From Robert Goulding, for sewer assessment, Prospect street..... | 27 20 |
| James Logan, for sewer assessment, Prospect street..... | 16 31 |
| Ellen Riley, for sewer assessment, Keene street..... | 16 91 |
| Heirs of Edward Griffin, for sewer as- sessment, Keene street..... | 11 93 |
| Heirs of Patrick Kilkenney, for sewer assessment, Keene street..... | 19 30 |
| Gardner W. King, for sewer assess- ment, Leroy street..... | 11 57 |
| Ann Coleman, for sewer assessment, Swift street..... | 9 66 |
| Milton Fox, for sewer assessment, Co- burn street..... | 72 90 |
| James H. Moulton, for sewer assess- ment, Coburn street..... | 50 34 |
| Emma J. Cotthaus, for sewer assess- ment, Hildreth street..... | 18 47 |
| Martha Rogers, for sewer assessment, Talbot street..... | 26 31 |
| G. W. Chase, and Alfred J. Livingston, for sewer assessment, Lawson street | 9 10 |
| D. W. Clement, for sewer assessment, Lawson street..... | 4 73 |
| John A. Knowles Jr., for sewer assess- ment, Somerset street..... | 2 84 |
| John S. Jaques, for sewer assessment, Dover street..... | 18 04 |
| Francis Carll, for sewer assessment, Westford street..... | 10 20 |
| Francis Carll, for sewer assessment, Westford street..... | 39 01 |
| Francis Carll, for sewer assessment, Westford street..... | 24 41 |
| Francis Carll, for sewer assessment, Westford street..... | 26 54 |
| George W. and Charles F. Young, for sewer assessment, Middlesex street | 128 98 |
| Appropriation for Roads and Bridges, for sewer assessment, Grove street | 6 72 |

Amounts carried forward \$943 15 \$64,708 26

Amounts brought forward..... \$943 15 \$64,708 26

Received into the Treasury on account of
SEWERS AND DRAINS:

IN DECEMBER.

| | | |
|--|-------|-------------|
| From Francis H. Chandler, for sewer assessment, School street..... | 59 22 | |
| William G. Howe, for sewer assessment, Myrtle street..... | 44 59 | |
| James Leach, for entering West street sewer..... | 16 73 | |
| L. Kittredge & Sons, for grates..... | 24 00 | |
| | <hr/> | 1,087 69 |
| | | <hr/> |
| | | \$65,795 95 |
| Transferred from Corporation Tax Account.. | | 1,500 00 |
| | | <hr/> |
| | | \$67,295 95 |
| | | <hr/> |

EXPENDITURES.

Paid for labor as per monthly pay-roll:

| | | |
|-----------------|-----------|-------------|
| In January..... | \$ 288 75 | |
| February..... | 213 25 | |
| March..... | 1,176 40 | |
| April..... | 4,286 49 | |
| May..... | 7,470 36 | |
| June..... | 6,606 59 | |
| July..... | 6,284 83 | |
| August..... | 5,730 85 | |
| September..... | 5,176 99 | |
| October..... | 3,967 43 | |
| November..... | 1,389 26 | |
| December..... | 368 49 | |
| | <hr/> | \$42,959 69 |

Paid for DAMAGES AND ABATEMENTS:

| | | |
|--|----------|-------------|
| To Mary Hodge, for damage to property on Riverside street..... | \$ 20 00 | |
| S. W. Churchill, for damage to house... | 1 25 | |
| John Doherty, for damage caused by construction of marginal sewer..... | 100 00 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$121 25 | \$42,959 69 |

Amounts brought forward..... \$121 25 \$42,959 69

Paid for DAMAGES AND ABATE-
MENTS :

| | | |
|---|-------|--------|
| To John Boyle, for amount paid by Daniel Churchill for remote drainage into sewer in Middlesex street in 1850.... | 13 50 | |
| Ira H. Plaisted, for overcharge in assessment on Franklin street....., | 9 26 | |
| James P. Mulcahey, for amount abated on assessment for sewer in Adams street..... | 21 00 | |
| Thomas E. Ward, for amount paid for entering sewer in Fletcher street in 1871..... | 20 00 | |
| Charles T. Fish, for amount paid for remote drainage into sewer in Branch street..... | 20 00 | |
| | <hr/> | 205 01 |

Paid for PIPE, BRICK, CEMENT,
IRON, LUMBER, ETC. :

| | | |
|--|----------|-------------|
| To A. Beard, for drain pipe and labor..... | \$ 6 87 | |
| N. T. Staples & Sons, for drain pipe... | 5,447 54 | |
| Robert Brown, for brick..... | 16 10 | |
| Jesse Gault, for brick..... | 4,626 00 | |
| L. Kittredge & Son, for cement..... | 239 20 | |
| Wm. E. Livingston, for cement, coal and brick..... | 1,939 86 | |
| A. W. Butcher, for iron, steel and borax..... | 84 16 | |
| H. W. Clapp, for sewer caps and traps | 144 00 | |
| Dodge, Gilbert & Co., for steel..... | 151 58 | |
| Hill Bros., for iron..... | 1 68 | |
| Pevey Bros., for man holes, catch basins, steps, hammers and covers..... | 2,682 52 | |
| Crosby Furniture Co., for moulding, etc. | 80 | |
| Davis & Sargent, for lumber..... | 226 33 | |
| Grafton County Lumber Co., for lumber | 95 85 | |
| Griffin & Lake, for rollers..... | 1 30 | |
| Howes & Burnham, for lumber and labor | 70 75 | |
| Lowell Gas Light Co., for lumber..... | 318 03 | |
| M. C. Pratt & Co, for lumber and labor | 24 21 | |
| H. Whitney & Co., for lumber..... | 418 41 | |
| Whitney & Tibbetts, for lumber | 310 60 | |
| Nashua & Lowell R. R., for transportation | 38 00 | |
| | <hr/> | 16,893 79 |
| <i>Amount carried forward</i> | | \$60,058 49 |

Amount brought forward..... \$60,058 49

Paid for SUNDRIES :

| | |
|--|------------|
| To Appropriation for Roads and Bridges, for labor..... | \$2,189 88 |
| Appropriation for Roads and Bridges, for serviees of Supt. of Streets for 1879..... | 800 00 |
| Appropriation for Roads and Bridges, for serviees of City Engineer for 1879 | 425 00 |
| Appropriation for Fire Department, for use of hose..... | 50 00 |
| Appropriation for Water Works, for pump valves, pipe, goose neeks, lead, labor, etc..... | 362 72 |
| Charles E. Adams, for hardware and tools..... | 162 79 |
| Sager Ashworth & Co., for file..... | 88 |
| John C. Bennett, for hardware, tools, etc..... | 22 44 |
| A. W. Butcher, for steel, borax, etc.... | 9 99 |
| H. A. Fielding, for hardware and tools | 147 26 |
| W. D. Harriman, for picks..... | 15 00 |
| Rogers, Taylor & Co., for hardware and tools..... | 23 30 |
| Horace B. Shattuck, for hardware and tools..... | 6 17 |
| Frederick Taylor, for hardware..... | 5 90 |
| C. W. Bisbee, for repairing tools..... | 50 |
| T. R. Garity, for sill coek, solder, labor, etc..... | 7 50 |
| Lowell Machine Shop, for castings and labor..... | 9 36 |
| S. G. Maek & Co., for pail, dipper, can, labor, etc..... | 10 55 |
| William McLarney & Co., for repair- ing sewer pump..... | 1 75 |
| H. Sntcliffe & Co., for repairing can and lantern..... | 50 |
| Albert Parsons, for sharpening drills and use of derriek..... | 54 91 |
| William Robinson, for repairing derrick | 2 50 |
| W. S. C. Sargent, for repairing pump, etc..... | 2 55 |
| Joseph Turner, for screws and nnts... | 7 50 |
| George H. Wight, for screws and repairing levelling rod..... | 1 00 |

Amounts carried forward..... \$4,319 95 \$60,058 49

Amounts brought forward..... \$4,319 95 \$60,058 49

Paid for SUNDRIES :

| | |
|--|--------|
| To H. H. Wilder & Co., for pump, lanterns, dippers, etc..... | 30 49 |
| A. L. Wright, for blacksmithing..... | 1 90 |
| Milton Aldrich, for mauls..... | 10 90 |
| John B. Palmer, for hammer and pick handles | 15 12 |
| Warren Wadleigh, for pick handles... | 13 75 |
| C. B. Coburn & Co., for oil tallow, rope, glass, putty, borax, packing, pails, brooms, lanterns, globes, casks, etc..... | 217 91 |
| J. Gates & Sons, for pump boxes, belting and leather..... | 37 55 |
| Fiske & Spalding, for paper..... | 2 62 |
| H. G. Holden, for dualin and fuse.... | 46 12 |
| Thomas Head, for rope, sheaves, iron, etc..... | 97 74 |
| Wm. E. Livingston, for coal..... | 16 00 |
| George W. Pearson, for roofing cloth... | 3 84 |
| John Ryan, for rope..... | 27 78 |
| Haskins & Montague, for rope..... | 34 37 |
| Stickney & Spofford, for pails..... | 1 25 |
| U. S. Cartridge Co., for powder..... | 22 35 |
| Mrs. Charles Ahern, for oatmeal, oil, matches and salt..... | 7 31 |
| Charles Ahern, for oatmeal, oil, salt, etc. | 14 22 |
| Belvidere Cash Store, for oil..... | 84 |
| Buttrick & Co., for grass seed..... | 53 |
| J. B. Cover & Co., for oatmeal..... | 48 |
| J. F. Callahan, for oatmeal, oil, and salt. | 10 76 |
| John Devine, for salt..... | 60 |
| P. Farnan, for oatmeal, oil, and salt.... | 2 61 |
| I. K. Goodale, for oatmeal..... | 80 |
| Hartwell & Co., for oil..... | 2 64 |
| W. A. Ingham & Co., for oatmeal, oil, and salt..... | 4 56 |
| R. C. Lord, for oatmeal..... | 60 |
| John McCluskey, for oatmeal, oil, and salt | 4 70 |
| Michael J. Noonan, for oil..... | 87 |
| Nichols & Fletcher, for powder, dualin, exploders, fuse, oil, etc..... | 787 27 |
| Fred H. Parker, for oatmeal and oil.... | 2 05 |
| J. A. Richardson, for salt..... | 1 05 |

Amounts carried forward..... \$5,741 53 \$60,058 49

Amounts brought forward..... \$5,741 53 \$60,058 49

Paid for SUNDRIES :

| | | |
|--|--------|--|
| To J. E. Ryan, for oatmeal, oil, and matches | 1 58 | |
| C. K. Russell & Son, for oatmeal, oil, matches and broom | 4 71 | |
| D. Whithed, for oatmeal, oil, matches, and salt | 40 04 | |
| C. E. Shorey & Co., for oatmeal, oil, salt, and borax | 13 15 | |
| M. C. Huntoon, for rubber boots | 19 00 | |
| Hapgood Wright, for rubber boots | 18 00 | |
| E. Burgess, for pens and envelopes | 2 75 | |
| Bachelor, Dumas & Co., for blank books | 9 87 | |
| F. P. Coggeshall & Son, for books, stationery, etc | 3 85 | |
| F. P. Coggeshall, for blank books | 50 | |
| J. Merrill & Son, for blank books, stationery, etc | 16 59 | |
| C. L. Knapp & Son, for advertising | 2 50 | |
| Morning Times, for advertising | 2 50 | |
| Marden & Rowell, for advertising | 2 50 | |
| Proprietors of Locks and Canals, for use of power pump, use of water, and rent of land | 63 81 | |
| Wm. H. Ward, for use of derrick, and damage to same | 60 75 | |
| A. K. Hood, for repairing derrick | 11 24 | |
| Smith Adams, for straw, hay, etc | 19 65 | |
| H. B. Barnes, for glazing | 1 75 | |
| William Kelley, for sash | 1 00 | |
| George E. Evans, for cash paid for postage stamps, postal cards, paste, etc ... | 2 41 | |
| A. J. Donnell, for cash paid for carriage hire | 2 00 | |
| H. O. Morse, for carriage hire | 2 00 | |
| John C. Woodward, for cash paid for expenses of committee | 8 60 | |
| Robert Park, for use of engine | 116 00 | |
| Richardson Ice Co., for use of engine ... | 200 00 | |
| E. A. & A. T. Smith, for repairing sidewalks | 13 50 | |
| Samuel Barton, for filing saws | 40 | |
| T. H. Curtis, for filing saws | 40 | |
| C. T. Haskell, for filing saws | 1 11 | |
| J. H. Haskell, for filing saws | 13 33 | |

Amounts carried forward..... \$6,397 02 \$60,058 49

Amounts brought forward..... \$6,397 02 \$60,058 49

Paid for SUNDRIES :

| | | | |
|----|---|-------|-------------|
| To | Joseph Marden, for filing saws..... | 3 20 | |
| | Boston & Lowell R. R., for transportation..... | 4 64 | |
| | Penniman & Co's Express, for transportation..... | 75 | |
| | George S. Butters, for use of team..... | 58 50 | |
| | B. G. Brown, for labor with team..... | 24 50 | |
| | Edward Boyle, for labor with team..... | 50 | |
| | James Barry, for use of horse | 17 25 | |
| | C. D. Starbird, for labor with team..... | 23 50 | |
| | Andrew B. Ellsworth, for labor..... | 42 12 | |
| | John Gillogley, for labor,..... | 6 87 | |
| | George W. Jockow, for labor..... | 32 50 | |
| | Jeremiah Murray, for labor..... | 44 63 | |
| | James Murray, for labor..... | 33 25 | |
| | Wm. M. Smith, for labor..... | 50 00 | |
| | Lowell Gas Light Co., for removing and replacing pipe on Wilder & Moody streets | 22 10 | |
| | | <hr/> | 6,761 33 |
| | Whole expenditure for the year.. .. | | \$66,819 82 |
| | Balance undrawn January 1, 1880..... | | 476 13 |
| | | | <hr/> |
| | | | \$67,295 95 |
| | | | <hr/> |

COMMONS.

| | | |
|--|----------|------------|
| Balance undrawn January 1, 1879..... | \$ 4 37 | |
| Appropriated and assessed in 1879..... | 2,500 00 | |
| | <hr/> | \$2,504 37 |

RECEIPTS.

Received into the Treasury on account of
COMMONS :

| | | |
|---|----------|------------|
| From J. L. Noyes, for horse..... | \$ 60 00 | |
| Samuel A. McPhetres, City Clerk, for rent of land for Fourth of July.... | 116 50 | |
| J. E. Conant, from sale of grass..... | 62 00 | |
| H. R. Barker, for breastplate and hal- ter | 5 00 | |
| John H. Morrison, for grass..... | 10 00 | |
| | <hr/> | 253 50 |
| | | <hr/> |
| | | \$2,757 87 |
| | | <hr/> |

EXPENDITURES.

Paid for LABOR :

| | | |
|------------------------------------|----------|------------|
| To Thomas Donohue..... | \$458 00 | |
| Michael Campion..... | 458 00 | |
| Michael Farrell..... | 458 00 | |
| John H. E. Quinn..... | 458 00 | |
| Daniel V. Hamblett..... | 91 00 | |
| | <hr/> | \$1,923 00 |
| <i>Amount carried forward.....</i> | | <hr/> |
| | | \$1,923 00 |

Amount brought forward..... \$1,923 00

Paid for SUNDRIES :

| | | |
|---|---------|------------|
| To Appropriation for School Houses, for paint and oil..... | \$ 4 23 | |
| Appropriation for Roads and Bridges, for keeping horse, labor, etc..... | 141 07 | |
| Appropriation for Repairs of Public Buildings, for nails, labor, etc..... | 10 48 | |
| Appropriation for Water Works, for use of water..... | 132 82 | |
| Charles E. Adams, for hardware, lantern globes, etc..... | 8 33 | |
| Frederic Taylor, for hardware, etc..... | 17 65 | |
| H. H. Wilder & Co., for ladles, chain, etc..... | 3 22 | |
| A. L. Wright, for repairing mowing machine | 2 30 | |
| A. L. Brooks & Co., for lumber..... | 86 | |
| Davis & Sargent, for lumber..... | 1 45 | |
| Howes & Burnham, for lumber..... | 12 71 | |
| H. Whitney & Co., for lumber..... | 18 80 | |
| Whitney & Tibbetts, for lumber..... | 1 26 | |
| C. B. Coburn & Co., for oil, alcohol and bottle..... | 1 05 | |
| D. V. Hamblett, for can, oil, salt, paint, etc..... | 1 03 | |
| J. A. Brabrook, for breastplate..... | 6 00 | |
| George Richardson, for horse..... | 75 00 | |
| Timothy Kelley, for teaming | 1 00 | |
| W. Parkhurst, for labor..... | 5 00 | |
| Patrick Sherlock, for labor..... | 4 00 | |
| C. E. Walker, for labor..... | 24 75 | |
| O. A. Simpson, for labor with team.... | 7 50 | |
| | <hr/> | 480 51 |
| Whole expenditure for the year..... | | \$2,403 51 |
| Balance undrawn January 1, 1880..... | | 354 36 |
| | | <hr/> |
| | | \$2,757 87 |
| | | <hr/> |

PRINTING AND ADVERTISING.

| | | |
|--|----|------------|
| Balance undrawn January 1, 1879,..... | \$ | 639 38 |
| Appropriated and assessed in 1879..... | | 2,000 00 |
| | | \$2,639 38 |
| Transferred from Corporation Tax Account.. | | 342 58 |
| | | \$2,981 96 |

EXPENDITURES.

Paid for PRINTING, ADVERTISING,
BINDING, ETC.:

| | | |
|--|----|------------|
| To Appropriation for Water Works, for 500 copies of the Annual Report of the Lowell Water Board..... | \$ | 53 90 |
| Leonard Brown, for printing, etc..... | | 35 25 |
| Leonard Brown & Co., for postal cards and printing..... | | 37 75 |
| Butterfield Bros., for printing..... | | 10 00 |
| Bacheller, Dumas & Co., for printing, binding, etc..... | | 37 00 |
| F. W. Gove & Co., for printing..... | | 7 00 |
| Huse, Goodwin & Co., for printing and advertising | | 588 16 |
| Harrington Bros., for printing and ad- vertising | | 407 55 |
| C. L. Knapp & Son, for printing and ad- vertising..... | | 345 05 |
| La Sentinelle, for advertising..... | | 11 00 |
| Morning Times, for printing and adver- tising | | 699 83 |
| | | \$2,232 49 |
| <i>Amount carried forward.....</i> | | |

Amount brought forward..... \$2,232 49

Paid for PRINTING, ADVERTISING,
BINDING, ETC.:

| | |
|--|--------|
| To Marden & Rowell, for printing and advertising..... | 225 75 |
| Stone, Bacheller & Livingston, for printing and advertising..... | 177 62 |
| W. S. Simons, for posting..... | 68 00 |

| | |
|--------------------------------------|------------|
| Whole expenditure for the year..... | \$2,703 86 |
| Balance undrawn January 1, 1880..... | 278 10 |
| | <hr/> |
| | \$2,981 96 |
| | <hr/> |

LIGHTING STREETS AND PUBLIC BUILDINGS.

| | | |
|--|-------------|-------------|
| Balance undrawn January 1, 1879..... | \$ 3,307 98 | |
| Appropriated and assessed in 1879..... | 16,000 00 | |
| | | \$19,307 98 |

RECEIPTS.

Received into the Treasury on account of
LIGHTING :

| | | |
|---|---------|-------------|
| From H. R. Barker, for old gas burners..... | \$10 00 | |
| Appropriation for Roads and Bridges, for coal oil..... | 4 06 | |
| | | 14 06 |
| | | \$19,322 04 |

EXPENDITURES.

Paid for LABOR LIGHTING STREETS :

| | | |
|----|------------------------------------|-------------------|
| To | Fred A. Bates..... | \$905 00 |
| | Fred Boynton..... | 36 00 |
| | George W. Bulmer..... | 120 88 |
| | Bernard Callahan..... | 116 28 |
| | Elude Buraby..... | 2 00 |
| | Richard Burns..... | 8 00 |
| | Frank Chapman..... | 2 00 |
| | Fred C. Cutting..... | 59 11 |
| | Elmer Child..... | 24 00 |
| | Engene Cunningham..... | 188 70 |
| | | |
| | <i>Amount carried forward.....</i> | <i>\$1,461 97</i> |

Amount brought forward..... \$1,461 97

Paid for LABOR LIGHTING STREETS :

| | | |
|---------------------------|--------|------------|
| To James Connors..... | 169 69 | |
| George W. Dana..... | 18 00 | |
| Thelan Ducharme..... | 8 00 | |
| Wm. A. Eastman..... | 30 00 | |
| Joseph H. Farnsworth..... | 24 00 | |
| Grant Fletcher..... | 6 00 | |
| Henry A. Flanders..... | 24 00 | |
| Asa W. Flint..... | 60 05 | |
| Frank Graham..... | 24 00 | |
| Willie Gray..... | 71 96 | |
| Enoch Gerrish..... | 82 88 | |
| George Holtham..... | 30 00 | |
| Frank Hubbard..... | 8 00 | |
| N. A. Hebbert..... | 9 84 | |
| D. C. Halloran..... | 5 00 | |
| John W. Jewett..... | 43 01 | |
| Arthur Kennedy..... | 480 85 | |
| Wm. R. Kennedy..... | 495 00 | |
| William Kneeland..... | 7 50 | |
| Ernest Lundberg..... | 12 00 | |
| John Lovett..... | 6 00 | |
| Charles E. Munn..... | 177 08 | |
| Frank Martin..... | 24 00 | |
| David McCarty..... | 9 00 | |
| Patrick Mahan..... | 15 75 | |
| Frank Melvin..... | 2 00 | |
| George Neult..... | 4 00 | |
| George Norton..... | 24 00 | |
| Joseph L. Pinder..... | 108 36 | |
| Joseph Present..... | 7 00 | |
| C. Page..... | 12 00 | |
| Henry Ritchie..... | 36 00 | |
| Willie Sheahan..... | 64 49 | |
| James Saunders..... | 9 00 | |
| Frank Urwin..... | 50 | |
| Frank Woodward..... | 24 00 | |
| Eugene Young..... | 62 02 | |
| Eddie Young..... | 24 00 | |
| | <hr/> | \$3,680 95 |

Paid for SUNDRIES :

| | | |
|---|----------|------------|
| To Appropriation for Roads and Bridges, for keeping horses, fuel, labor, etc.... | \$620 68 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$620 68 | \$3,680 95 |

| | | |
|-------------------------------------|----------|------------|
| <i>Amounts brought forward.....</i> | \$620 68 | \$3,680 95 |
|-------------------------------------|----------|------------|

Paid for SUNDRIES :

| | | |
|--|----------|--|
| To Appropriation for Fire Department, for labor..... | 4 10 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 25 31 | |
| Appropriation for Water Works, for use of water..... | 10 00 | |
| Lowell Gas Light Co., for gas consumed on streets..... | 8,203 77 | |
| Charles E. Adams, for hardware, lamps, torches, burners, globes, etc..... | 430 08 | |
| Horace B. Shattuck, for hardware..... | 85 | |
| A. W. Butcher, for bolts..... | 35 | |
| Appleton National Bank, for lamp-post and lantern..... | 15 75 | |
| Cole & Nichols, for lamp-posts..... | 208 00 | |
| Pevey Bros., for lamp-posts, arms, washers, etc..... | 156 88 | |
| James Barris, for lamp frames..... | 21 00 | |
| W. D. Harriman, for lamp frames..... | 6 00 | |
| Hayden Company, for lamp-post cocks.. | 31 20 | |
| Kelley & Alexander, for wrenches..... | 3 00 | |
| Fred A. Bates, for pipe, fittings, burners and torch..... | 33 64 | |
| R. F. Britton, for blacksmithing, pipe, and matches | 56 12 | |
| T. R. Garity, for pipe, couplings, fixtures and labor..... | 10 41 | |
| S. G. Mack & Co., for lanterns, brushes, and labor..... | 138 48 | |
| T. Costello & Co., for labor..... | 80 | |
| Thomas Cunningham & Sons, for pipe, plugs, and tools..... | 85 93 | |
| George H. Wight, for lamp-post cocks, etc..... | 22 29 | |
| H. H. Wilder, for lantern frames, lamps, cans, labor, etc..... | 217 05 | |
| A. L. Brooks & Co., for labor..... | 25 | |
| Davis & Sargent, for lumber..... | 7 73 | |
| Griffin & Lake, for handles..... | 3 80 | |
| Howes & Burnham, for posts..... | 21 45 | |
| William Kelley, for door and sash..... | 6 50 | |
| C. B. Coburn & Co., for oil, naphtha, spirits turpentine, alcohol, soap, lamp, glass, wicking, brushes, etc..... | 217 81 | |

| | | |
|-------------------------------------|-------------|------------|
| <i>Amounts carried forward.....</i> | \$10,559 23 | \$3,680 95 |
|-------------------------------------|-------------|------------|

Amounts brought forward..... \$10,559 23 \$3,680 95

Paid for SUNDRIES :

| | | |
|---|--------|-------------|
| To P. Dempsey & Co., for alcohol..... | 99 75 | |
| French & Puffer, for burners, chimneys, collars, reflectors, wicks, etc..... | 24 65 | |
| Fiske & Spalding, for painting and glaz- ing lanterns, etc..... | 84 96 | |
| Jonathan Kendall, for glass and oil..... | 31 74 | |
| E. Legro & Co., for coal oil..... | 4 44 | |
| Andrew G. Paul, Agent, for naphtha... | 306 04 | |
| R. Simpson, for matches..... | 10 00 | |
| S. L. Butman, for blankets, whip, oil, and repairing harness..... | 27 05 | |
| T. M. Bolton, for harness and repair- ing harness..... | 63 80 | |
| S. & G. H. Convers, for wagon..... | 85 00 | |
| Swett & Robbins, for repairing carriage. | 14 35 | |
| Hill Bros., for repairing carriage..... | 17 58 | |
| C. B. Relyea, for repairing carriage.... | 1 25 | |
| Sawyer & Taylor, for repairing harness and soap..... | 5 85 | |
| H. Hosford & Co., for horse blankets... | 10 00 | |
| George S. Butters, for use of horse, and difference in horses exchanged..... | 215 00 | |
| P. B. Mead, for horse..... | 215 00 | |
| J. L. Noyes, for use of horse..... | 11 00 | |
| C. F. Blanchard, for horse liniment..... | 1 00 | |
| E. A. & A. T. Smith, for repairing side- walk..... | 4 50 | |
| Benj. F. Johnson, for taking care of lamps on E. Merrimack street..... | 3 50 | |
| David McCarthy, for taking care of lamps on Pawtucket street..... | 1 50 | |
| F. P. Coggeshall & Son, for blank books and stationery..... | 4 15 | |
| Stone, Bacheller & Livingston, for print- ing..... | 3 50 | |
| Boston & Maine R. R., for transporta- tion..... | 1 35 | |
| Boston & Lowell R. R., for transporta- tion..... | 25 | |
| Lovejoy & Co.'s Express, for transporta- tion..... | 1 25 | |
| Penniman & Co.'s Express, for trans- portation..... | 25 | |
| | <hr/> | 11,807 94 |
| <i>Amount carried forward</i> | | \$15,488 89 |

| | | |
|--|------------|-------------|
| <i>Amount brought forward</i> | | \$15,488 89 |
| Paid for LIGHTING PUBLIC BUILD- INGS: | | |
| To Lowell Gas Light Co., for gas..... | \$1,512 78 | |
| | <hr/> | 1,512 78 |
| Whole expenditure for the year..... | | \$17,001 67 |
| Balance undrawn January 1, 1880..... | | 2 320 37 |
| | | <hr/> |
| | | \$19,322 04 |
| | | <hr/> |

REPAIRS OF PUBLIC BUILDINGS.

| | | |
|--|------------|--|
| Balance undrawn January 1, 1879..... | \$3,256 58 | |
| Appropriated and assessed in 1879..... | 3,500 00 | |
| | \$6,756 58 | |

RECEIPTS.

Received into the Treasury on account of
REPAIRS OF PUBLIC BUILD-
INGS :

| | | |
|---|------------|--|
| From Appropriation for Schools, for labor, etc..... | \$805 41 | |
| Appropriation for School Houses, for labor, etc..... | 171 51 | |
| Appropriation for Paupers, for labor, lumber, shellac, varnish, etc..... | 355 16 | |
| Appropriation for Police, for labor and material..... | 47 71 | |
| Appropriation for Fire Department, for labor, etc..... | 75 30 | |
| Appropriation for Commons, for labor | 10 48 | |
| Appropriation for Lighting, for labor.. | 25 31 | |
| Appropriation for Health, for labor, etc..... | 280 60 | |
| Appropriation for Water Works, for labor, etc..... | 112 61 | |
| Reserved Fund, for labor and material | 116 54 | |
| L. G. Howe, for use of ward-rooms... | 53 00 | |
| L. G. Howe, for old material..... | 13 42 | |
| G. S. Glines, for use of smoke house.. | 5 00 | |
| Boston & Lowell R. R. Co., for repairs on roof of Huntington Hall..... | 21 39 | |
| | 2,093 44 | |
| | \$8,850 02 | |

EXPENDITURES.

Paid for LABOR as per monthly pay-roll :

| | | |
|-------------------------|----------|------------|
| To Frank F. Abbott..... | \$ 88 37 | |
| F. A. Abbott..... | 31 50 | |
| John Biggs | 283 49 | |
| W. D. Cheney | 319 19 | |
| Joseph Convery..... | 95 50 | |
| James Campbell..... | 13 00 | |
| Peter Dunn..... | 15 00 | |
| Jeremiah Duhig..... | 57 37 | |
| James E. Duffy..... | 9 00 | |
| John Donahoe..... | 7 00 | |
| James Enright..... | 143 61 | |
| Charles Foley..... | 221 61 | |
| Augustus B. Foss | 21 06 | |
| William Flagg | 16 50 | |
| Charles Graham..... | 67 00 | |
| John F. Gallivan..... | 39 38 | |
| Daniel Hilliard..... | 74 26 | |
| William Hart..... | 3 75 | |
| Frank Johnson..... | 40 50 | |
| Dennis Kohawn..... | 40 12 | |
| Edward E. Kelley..... | 6 00 | |
| John Kennan..... | 7 87 | |
| L. P. Little..... | 261 55 | |
| Charles Lord..... | 4 50 | |
| A. H. Livermore..... | 7 00 | |
| A. McCarthy..... | 3 12 | |
| George McKenna..... | 6 75 | |
| M. J. O'Hare..... | 49 00 | |
| John Quinn..... | 101 99 | |
| Patrick Quinn..... | 87 | |
| H. E. Reynolds..... | 44 00 | |
| James Riley..... | 30 00 | |
| Daniel Reynolds..... | 1 00 | |
| W. N. Roberts..... | 6 00 | |
| B. A. Smith..... | 284 05 | |
| W. N. Smith..... | 106 00 | |
| S. O. Sanderson..... | 39 38 | |
| J. L. Thomson..... | 128 50 | |
| | | \$2,674 79 |

Paid for SUNDRIES :

| | | |
|---|-----------------|-------------------|
| To Appropriation for Roads and Bridges, for labor, fuel etc..... | \$118 91 | |
| <i>Amounts carried forward.....</i> | <i>\$118 91</i> | <i>\$2,674 79</i> |

Amounts brought forward..... \$118 91 \$2,674 79

Paid for SUNDRIES :

| | |
|---|----------|
| To Appropriation for Water Works, for use of water, pipe, labor, etc..... | 43 47 |
| Reserved Fund, for coal..... | 14 21 |
| C. P. Barclay, on account of Engine House and Ward room on Fourth street..... | 1,527 50 |
| E. A. & A. T. Smith, for concrete at Engine House and Ward room, Fourth street..... | 260 05 |
| A. L. Brooks & Co., for lumber..... | 110 31 |
| Griffin & Lake, for lumber, posts, rails, balusters, labor, etc..... | 97 37 |
| Howes & Burnham, for lumber and labor | 187 03 |
| William Kelley, for sash and windows.. | 17 25 |
| William Kelley & Son, for casements... | 1 50 |
| A. Keddie, for sawing lumber..... | 3 60 |
| M. C. Pratt & Co., for lumber, doors, moulding and labor..... | 49 50 |
| H. Whitney & Co., for lumber..... | 181 02 |
| Alfred Gilman & Son, for railing..... | 10 00 |
| Charles E. Adams, for hardware..... | 6 20 |
| A. W. Butcher, for iron..... | 2 35 |
| H. A. Fielding, for hardware..... | 3 42 |
| Pevey Bros., for castings..... | 10 40 |
| H. B. Shattuck, for hardware..... | 51 63 |
| Rogers, Taylor & Co., for hardware.... | 15 61 |
| Frederiek Taylor, for hardware..... | 55 74 |
| Milton Aldrich, for clamps..... | 5 42 |
| James Barris, for iron, bolts, hooks, labor, etc..... | 15 29 |
| T. Costello & Co., for pipe, thimbles, cement, solder, putty, labor, etc..... | 57 77 |
| T. H. Curtis, for key and labor..... | 1 00 |
| John Gilchrist, for pipe, couplings, labor, etc..... | 35 87 |
| T. R. Garity. for pipe, couplings, globes, labor, etc..... | 76 56 |
| J. L. Hammett, for bulls eyes..... | 4 00 |
| S. G. Mack & Co., for pails, paint and labor | 1 70 |
| F. W. Proctor, for pipe, packing, labor. etc..... | 73 04 |
| Rice & Co, for wire cloth..... | 1 43 |
| Edwin Sanborn, for door dogs..... | 1 25 |

Amounts carried forward..... \$3,040 40 \$2,674 79

Amounts brought forward..... \$3,040 40 \$2,674 79

Paid for SUNDRIES :

| | |
|---|--------|
| To George H. Wight, for pipe, fittings and labor..... | 8 01 |
| N. J. Wier & Co., for ash barrels..... | 27 00 |
| H. H. Wilder & Co., for "Globe Ventilator," register, galvanized pipe, tin, water fixtures, labor, etc..... | 220 28 |
| Snell O. Wade, for pipe, bolts, packing and labor..... | 11 94 |
| Luther Kittredge & Son, for pipe, cement and labor..... | 25 32 |
| N. T. Staples & Sons, for pipe and traps | 3 26 |
| S. D. Butterworth, for mason work and material..... | 83 74 |
| William Clifford, for mason work..... | 4 38 |
| F. M. Merrill, for mason work and material..... | 37 03 |
| D. M. Prescott, for mason work and material..... | 9 25 |
| John L. Powers, for mason work and material..... | 15 00 |
| Wyatt Stevens, for whitewashing..... | 12 00 |
| William Waugh, for slate, zinc and labor..... | 51 48 |
| C. B. Coburn & Co., for lead, oil, japan, varnish, asphaltum, glass, brushes, etc..... | 426 48 |
| Fiske & Spalding, for paint, oil, brushes, moulding, nails, etc..... | 79 17 |
| Jonathan Kendall, for oil, shellae, spirits turpentine, varnish, whiting, magnesia, etc..... | 58 74 |
| A. P. Noyes, for soap..... | 1 25 |
| S. L. Butman, for whip socket..... | 1 35 |
| J. A. Brabrook, for harness, repairing harnesses, etc..... | 57 95 |
| C. A. Ross & Co., for repairing carriage | 1 00 |
| Swett & Robbins, for repairing carriage | 29 80 |
| Adams & Co., for hocking..... | 12 50 |
| Benner Bros, for enamelled cloth..... | 6 60 |
| Lowell Felting Mills, for felt..... | 13 92 |
| Offutt & Whitaker, for carpeting, dipper and chain | 8 87 |
| George H. Crafts, for re-seating chair.. | 1 00 |
| Whithed & Co., for coal..... | 20 76 |

Amounts carried forward \$4,268 48 \$2,674 79

Amounts brought forward..... \$4,268 48 \$2,674 79

Paid for SUNDRIES :

| | | |
|---|-------|------------------|
| To H. C. Church, for books, stationery, etc. | 7 81 | |
| Penniman & Co.'s Express, for transportation..... | 25 | |
| William Roberts, for teaming..... | 2 00 | |
| | <hr/> | 4,278 54 |
| Whole expenditure for the year..... | | <hr/> \$6,953 33 |
| Balance undrawn January 1, 1880 | | 1,896 69 |
| | | <hr/> |
| | | \$8,850 02 |
| | | <hr/> |

CITY LIBRARY.

| | | |
|--|----------|------------|
| Balance undrawn January 1, 1879..... | \$ 95 36 | |
| Appropriated and assessed in 1879..... | 1,500 00 | |
| | <hr/> | \$1,595 36 |

RECEIPTS.

Received into the Treasury on account of
CITY LIBRARY :

| | | |
|--|------------|-------------|
| From County of Middlesex, on account of dog licenses of 1878..... | \$2,118 56 | |
| Marshall H. Clough, Librarian, for sub- scriptions..... | 83 50 | |
| Marshall H. Clough, Librarian, for cat- alogues, supplements, fines, lost books and paper..... | 8 77 | |
| Joseph A. Green, Librarian, for sub- scriptions..... | 864 00 | |
| Joseph A. Green, Librarian, for cata- logues, supplements, fines, lost books and paper..... | 112 81 | |
| | <hr/> | 3,187 64 |
| | | <hr/> |
| | | \$4,783 00 |
| | | <hr/> <hr/> |

EXPENDITURES.

Paid LIBRARIAN :

| | | |
|---------------------------------|------------|------------|
| To Joseph A. Green, salary..... | \$1,025 00 | |
| | <hr/> | \$1,025 00 |

Paid for BOOKS :

| | | |
|-------------------------------------|----------|------------|
| To John Brown | \$ 13 00 | |
| F. P. Coggeshall & Son..... | 426 97 | |
| F. P. Coggeshall | 496 07 | |
| | <hr/> | |
| <i>Amounts carried forward.....</i> | \$936 04 | \$1,025 00 |

Amounts brought forward..... \$936 04 \$1,025 00

Paid for BOOKS :

| | | |
|-------------------------------|-------|----------|
| To Wm. T. Coggeshall..... | 4 60 | |
| F. S. Cooledge..... | 51 00 | |
| Estes & Lauriat..... | 19 50 | |
| Henry Fleetwood, Manager..... | 6 50 | |
| Joseph A. Green..... | 49 63 | |
| | <hr/> | 1,067 27 |

Paid for SUNDRIES :

| | |
|---|----------|
| To Appropriation for Schools, for brooms and brushes..... | \$ 2 30 |
| Appropriation for School Houses, for lumber and labor..... | 8 45 |
| Hocum Hosford, for rent of rooms in Masonic Temple..... | 1,200 00 |
| Hocum Hosford, for heating..... | 200 00 |
| Lowell Gas Light Co., for gas..... | 146 78 |
| Bacheller, Dumas & Co., for blank books and binding..... | 392 40 |
| F. P. Coggeshall & Son, for stationery.. | 12 30 |
| F. P. Coggeshall, for stationery..... | 7 63 |
| F. J. Flemings, for paper..... | 48 40 |
| Harrington Bros., for printing and advertising | 8 00 |
| Huse, Goodwin & Co., for printing and advertising..... | 103 80 |
| C. L. Knapp & Son, for printing and advertising | 166 25 |
| Morning Times, for printing and advertising..... | 3 75 |
| Marden & Rowell, for advertising..... | 2 00 |
| Stone, Bacheller & Livingston, for printing | 17 50 |
| Salmon Bros., for printing..... | 7 50 |
| Marshall H. Clough, for services on supplements..... | 31 14 |
| Joseph A. Green, for cash paid for postage, express, tracing cloth, paper, matches, water-cooler, labor, etc..... | 40 98 |
| Sylvester Bean, for paste | 3 34 |
| T. R. Garity, for basin, plaster and labor | 4 85 |

Amounts carried forward..... \$2,407 37 \$2,092 27

Amounts brought forward..... \$2,407 37 \$2,092 27

Paid for SUNDRIES :

| | | |
|---|-------|------------------|
| To Rogers, Taylor & Co., for hardware.... | 12 | |
| Richardson Ice Co., for ice..... | 7 50 | |
| | <hr/> | 2,414 99 |
| Whole expenditure for the year..... | | <hr/> \$4,507 26 |
| Balance undrawn January 1, 1880..... | | 275 74 |
| | | <hr/> |
| | | \$4,783 00 |
| | | <hr/> <hr/> |

SALARIES.

| | | |
|---|-------------|--------------------|
| Balance undrawn January 1, 1879..... | \$ 2,371 96 | |
| Appropriated and assessed in 1879..... | 15,000 00 | |
| Transferred from Corporation Tax Account. | 500 00 | |
| | | <u>\$17,871 96</u> |

EXPENDITURES :

| | | |
|--|------------|--------------------|
| Paid John A. G. Richardson, Mayor..... | \$1,800 00 | |
| John H. McAlvin, City Treasurer and Collector of Taxes..... | 2,250 00 | |
| Samuel A. McPhetres, City Clerk..... | 1,556 25 | |
| David Chasc, Auditor of Accounts and Clerk of Common Council..... | 1,525 00 | |
| George F. Richardson, City Solicitor... | 1,312 50 | |
| Lorenzo G. Howe, Supt. of Public Buildings..... | 1,325 00 | |
| John H. Nichols, City Messenger..... | 925 00 | |
| Edwin W. Trueworthy, City Physician and Supt. of Burials..... | 700 00 | |
| James Murphy, Sealer of Weights and Measures..... | 400 00 | |
| Owen W. Cox, Inspector of Milk..... | 2 08 | |
| Joseph H. Dallagher, Inspector of Milk | 22 92 | |
| James A. Manuel, Pound Keeper..... | 28 75 | |
| Abijah Cutter, Fish Warden..... | 36 25 | |
| Francis Goward, Chairman of the Board of Assessors..... | 950 00 | |
| Isaac A. Fletcher, Assessor of Taxes.. | 800 00 | |
| David Lane, Assessor of Taxes..... | 800 00 | |
| Michael H. McCue, Assessor of Taxes. | 800 00 | |
| James Marren, Assessor of Taxes..... | 800 00 | |
| William W. Reed, Assessor of Taxes.. | 800 00 | |
| Whole expenditure for the year..... | | \$16,833 75 |
| Balance undrawn January 1, 1880..... | | 1,038 21 |
| | | <u>\$17,871 96</u> |

HEALTH ACCOUNT.

| | | |
|--|-----------|-------------------|
| Balance undrawn January 1, 1879..... | \$ 362 52 | |
| Appropriated and assessed in 1879..... | 2,000 00 | |
| Transferred from Corporation Tax Account.. | 500 00 | |
| | | <u>\$2,862 52</u> |

EXPENDITURES.

Paid BOARD OF HEALTH:

| | | |
|------------------------------------|----------|-----------------|
| To James W. B. Shaw, Chairman..... | \$300 00 | |
| Michael Hoar..... | 200 00 | |
| | | <u>\$500 00</u> |

Paid for NEW BATHING HOUSE ON CONCORD RIVER:

| | | |
|--|----------|-------------------|
| To Appropriation for School Houses, for paint, oil, etc..... | \$ 11 95 | |
| Appropriation for Repairs of Public Buildings, for labor..... | 272 83 | |
| A. L. Brooks & Co., for lumber..... | 36 88 | |
| Davis & Sargent, for lumber..... | 368 56 | |
| American Bolt Co., for iron rods..... | 1 85 | |
| A. W. Butcher, for chain..... | 6 16 | |
| James Barris, for bolts and labor..... | 85 | |
| S. G. Mack & Co., for zinc and labor.. | 4 91 | |
| H. A. Fielding, for hardware..... | 37 49 | |
| H. B. Shattuck, for hardware..... | 1 38 | |
| Frederick Taylor, for hardware..... | 4 65 | |
| C. B. Coburn & Co., for paints, casks, rope, etc..... | 188 79 | |
| L. W. Huntington, for use of boat..... | 7 00 | |
| James Leach, for teaming..... | 50 | |
| William Roberts, for teaming..... | 4 50 | |
| John E. Sullivan, for services as watch- man..... | 15 00 | |
| | | <u>963 30</u> |
| <i>Amount carried forward.....</i> | | <u>\$1,463 30</u> |

Amount brought forward..... \$1,463 30

Paid for PUBLIC BATHING :

| | | |
|--|---------|--------------|
| To Appropriation for Repairs of Public Buildings, for labor..... | \$ 7 77 | |
| Howes & Burnham, for lumber..... | 8 58 | |
| Proprietors of Locks and Canals, for rent of land..... | 5 00 | |
| Charles Cassilely, for services at bathing house..... | 148 50 | |
| Peter Donahue, for services at bathing house..... | 155 25 | |
| Michael Hoar, for services at bathing house..... | 84 00 | |
| Ann Roper, for services at bathing house..... | 13 00 | |
| John E. Sullivan, for services at bathing house..... | 131 25 | |
| William Roberts for teaming..... | 4 50 | |
| | | <hr/> 557 85 |

Paid for SUNDRIES :

| | | |
|--|------------|------------------------|
| To Appropriation for Roads and Bridges, for labor with team, and use of horse and cart | \$293 91 | |
| Joseph Barrett, for labor..... | 195 38 | |
| William Hart, for labor..... | 228 52 | |
| Bachelor, Dumas & Co., for blank books..... | 75 | |
| Leonard Brown, for postal cards and printing..... | 2 50 | |
| Huse, Goodwin & Co., for printing and advertising..... | 3 00 | |
| Marden & Rowell, for printing and advertising..... | 7 75 | |
| J. W. B. Shaw, for cash paid for postage stamps..... | 3 00 | |
| C. F. Blanchard, for vaccine points | 3 75 | |
| Herbert E. Webster & Co., for disinfecting on the north side of Middle street. | 5 00 | |
| H. O. Morse, for carriage hire..... | 7 50 | |
| | | <hr/> 751 06 |
| Whole expenditure for the year..... | \$2,772 21 | |
| Balance undrawn January 1, 1880..... | 90 31 | |
| | | <hr/> <hr/> \$2,862 52 |

WATER WORKS.

| | | |
|--|----------|----|
| Balance undrawn January 1, 1879 | \$10,204 | 87 |
| Appropriated and assessed in 1879..... | 25,000 | 00 |
| | \$35,204 | 87 |

RECEIPTS.

Received into the Treasury on account of
WATER WORKS :

| | | |
|---|----|--------------|
| From Sundry persons, for use of water, service pipe and sundries, in 1874.... | \$ | 7 08 |
| Sundry persons, for use of water, service pipe and sundries, in 1875.... | | 6 67 |
| Sundry persons, for use of water, service pipe and sundries, in 1876.... | | 41 29 |
| Sundry persons, for use of water, service pipe and sundries, in 1877.... | | 28 73 |
| Sundry persons, for use of water, service pipe and sundries, in 1878.... | | 5,726 12 |
| Sundry persons, for use of water, service pipe and sundries, in 1879.... | | 104,357 45 |
| Sundry persons, for fees for shutting off and letting on water..... | | 18 00 |
| | | 110,185 34 |
| Transferred from National Bank Tax Account | | 5,000 00 |
| | | \$150,390 21 |

EXPENDITURES.

Paid SUPERINTENDENT AND PRESIDENT OF WATER BOARD :

| | | |
|---|----------|------------|
| To Samuel P. Griffin, Superintendent..... | \$544 22 | |
| Horace G. Holden, Superintendent..... | 918 28 | |
| Albert A. Haggett, President..... | 350 00 | |
| | <hr/> | \$1,812 50 |

Paid for LABOR as per monthly pay-rolls :

| | | |
|-----------------|------------|-----------|
| In January..... | \$1,262 92 | |
| February..... | 1,228 22 | |
| March..... | 1,318 66 | |
| April..... | 1,496 90 | |
| May..... | 1,460 15 | |
| June..... | 1,721 83 | |
| July..... | 1,604 56 | |
| August..... | 1,346 69 | |
| September..... | 1,232 45 | |
| October..... | 1,429 86 | |
| November..... | 1,419 74 | |
| December..... | 996 86 | |
| | <hr/> | 16,518 84 |

Paid for INTEREST :

| | | |
|---|-------------|------------|
| To Sundry persons, for interest on City of Lowell Water Loan Bonds..... | \$77,040 00 | |
| City Institution for Savings, for interest on notes..... | 3,250 00 | |
| Lowell Institution for Savings, for interest on notes..... | 25,100 00 | |
| Commonwealth of Massachusetts, for interest on note..... | 2,500 00 | |
| | <hr/> | 107,890 00 |

Paid for FUEL :

| | | |
|----------------------------------|-----------|----------|
| To Daniel Gage, for wood..... | \$ 338 23 | |
| Wm. E. Livingston, for coal..... | 4,406 45 | |
| | <hr/> | 4,744 68 |

Paid for PIPE, HYDRANTS, METERS, ETC. :

| | | |
|--|----------|--------------|
| To Chelmsford Foundry Co., for pipe and elbows..... | \$17 31 | |
| Thomas Cunningham & Son, for pipe, tees, plugs, etc..... | 96 84 | |
| | <hr/> | |
| <i>Amounts carried forward.....</i> | \$114 15 | \$130,966 02 |

Amounts brought forward..... \$114 15 \$130,966 02

Paid for PIPE, HYDRANTS, METERS,
ETC. :

| | | |
|---|----------|-----------|
| To Gloucester Iron Works, for pipe, reducers and special castings..... | 6,345 08 | |
| Morris, Tasker & Co., for pipe..... | 421 72 | |
| Middlesex Co., for pipe and turns..... | 14 50 | |
| James P. Roberts, for pipe, elbows, couplings and labor..... | 19 42 | |
| George Woodman & Co., for pipe, unions, etc..... | 819 99 | |
| Boston Machine Co., for hydrants, valves, gates, etc..... | 955 35 | |
| Chapman Valve Manufacturing Co., for hydrants, nozzle, etc..... | 56 16 | |
| Pattee & Perkins, for hydrants..... | 88 10 | |
| Frederick Ayer, for meter..... | 23 00 | |
| H. R. Barker, for meter..... | 20 00 | |
| W. E. Desper & Co., for meters, etc... | 379 65 | |
| Henry Emery, for meter..... | 10 00 | |
| Sarah B. Richardson, for meter..... | 12 00 | |
| Union Water Meter Co., for meters and labor..... | 1,811 20 | |
| Henry R. Worthington, for meters, cast- ings and labor..... | 1,374 87 | |
| Augustine Thompson, for meter..... | 11 00 | |
| Jenkins Bros., for meter packages..... | 1 65 | |
| Crosby Steam Gauge and Valve Co., for repairing steam gauge..... | 1 00 | |
| George H. Wight, for cocks, unions, sockets, etc..... | 594 33 | |
| B. C. F. & N. B. Railroad, for trans- portation..... | 3 52 | |
| Boston & Maine R. R., for transporta- tion..... | 702 53 | |
| Boston & Lowell R. R., for transporta- tion..... | 18 76 | |
| Nashua & Lowell R. R., for transporta- tion..... | 21 21 | |
| Old Colony R. R., for transportation... | 31 48 | |
| | | 13,850 67 |

Paid for SUNDRIES :

| | | |
|--|---------|--------------|
| To Appropriation for School Houses, for lumber, nails, paint and labor..... | \$31 25 | |
| <i>Amounts carried forward</i> | \$31 25 | \$144,816 69 |

Amounts brought forward..... \$31 25 \$144,816 69

Paid for SUNDRIES :

| | |
|--|--------|
| To Appropriation for Roads and Bridges, for services of City Engineer and As- sistants | 343 00 |
| Appropriation for Roads and Bridges, for keeping horse, labor, etc..... | 258 39 |
| Appropriation for Fire Department, for lumber, use of horse and labor teaming pipe, etc..... | 422 85 |
| Appropriation for Repairs of Public Buildings, for labor, etc..... | 112 61 |
| A. L. Brooks & Co., for lumber..... | 38 81 |
| A. Bachelder & Co., for gate boxes.... | 81 25 |
| Howes and Burnham, for lumber..... | 14 85 |
| Jenkins Bros., for boxes..... | 4 55 |
| M. C. Pratt & Co., for lumber and labor | 183 42 |
| Proprietors of Locks and Canals, for kyanizing lumber, etc..... | 70 43 |
| American Bolt Co., for bolts, nuts, etc. | 6 53 |
| A. W. Butcher, for iron, steel, bolts, etc..... | 16 72 |
| George F. Blair, for foot lathe..... | 15 00 |
| Cole & Nichols, for castings..... | 67 56 |
| N. N. Card, for repairing lightning rod. | 20 00 |
| T. Costello & Co., for pipe and labor... | 2 71 |
| John A. Denton, for brass castings..... | 12 30 |
| T. R. Garity, for hose, pipe, labor, etc.. | 37 27 |
| Frank P. Hill & Co., for steel..... | 2 28 |
| W. D. Harriman, for wrench, and labor | 16 65 |
| Horace G. Holden, for water fixtures, dualin, ladder, use of boat, travelling expenses, etc..... | 159 62 |
| Lowell Machine Shop, for iron and labor | 36 25 |
| S. G. Mack & Co., for lamp, can, labor, etc..... | 9 55 |
| James F. Norton, for plugs, nipples, crosses, labor, etc..... | 38 90 |
| Pevey Bros., for castings..... | 754 86 |
| Runals & Foster, for hydrant cover frames..... | 1 35 |
| C. A. Ross & Co., for repairing carriage | 5 90 |
| Rice & Co., for wire..... | 1 10 |
| James P. Roberts, for unions, tees, couplings, scraper, etc..... | 13 05 |
| Witherell Bros.. for steel..... | 7 10 |

Amounts carried forward..... \$2,786 11 \$144,816 69

Amounts brought forward..... \$2,786 11 \$144,816 69

Paid for SUNDRIES :

| | |
|---|--------|
| To George H. Sampson, for magnetic battery | 25 00 |
| H. H. Wilder & Co., for pipe, couplings, solder, cement, pails, labor, etc..... | 33 82 |
| Charles E. Adams, for hardware, etc.... | 8 37 |
| H. A. Fielding, for hardware, etc..... | 10 01 |
| Rogers, Taylor & Co., for hardware.... | 24 91 |
| H. B. Shattuck, for hardware and tools. | 71 69 |
| Frederick Taylor, for hardware and tools, | 62 47 |
| Boston Lead Co., for tin pipe, pig lead, Trustees for Creditors of Boston Lead Co., for block-tin and solder..... | 373 03 |
| Benner Bros., for stool, etc..... | 9 48 |
| C. B. Coburn & Co., for oil, lead, packing, asphaltum, soap, rope, lanterns, matches, brooms, brushes, etc..... | 3 85 |
| Fiske & Spalding, for paint, pencils, paper, signs, labor, etc..... | 238 53 |
| French & Puffer, for lantern globes..... | 14 33 |
| Josiah Gates & Sons, for pump-box, leather and hose..... | 1 25 |
| Samuel Horn & Co., for tallow..... | 6 28 |
| Haskins & Montague, for rope..... | 45 67 |
| Hatch & Littlefield, for pasteboard..... | 33 34 |
| Lowell Hosiery Co., for waste..... | 2 00 |
| Wm. E. Livingston, for lime, cement, and charcoal..... | 7 65 |
| M. Meaney, for horse cover..... | 12 00 |
| Nichols & Fletcher, for powder, dynamite, fuse, exploders, soap, etc..... | 4 00 |
| Stiles, Rogers & Co., for oatmeal..... | 227 66 |
| Darins Whithed, for oatmeal..... | 5 36 |
| C. P. Talbot & Co., for soda ash, and oxalic acid..... | 70 |
| United States and Foreign Salamander Felting Co., for felting and labor.... | 3 12 |
| Bachelor, Dumas & Co., for blank books, printing, and binding..... | 105 35 |
| Leonard Brown, for printing..... | 36 70 |
| Huse, Goodwin & Co., for printing..... | 3 25 |
| C. L. Knapp & Son, for printing and advertising..... | 207 44 |
| Marden & Rowell, for printing and advertising..... | 33 25 |
| | 12 25 |

Amounts carried forward..... \$4,408 87 \$144,816 69

Amounts brought forward..... \$4,408 87 \$144,816 69

Paid for SUNDRIES :

| | |
|--|--------|
| To Morning Times, for printing and advertising | 13 75 |
| Stone, Bacheller & Livingston, for printing and advertising | 13 75 |
| Salmon Bros., for printing | 12 65 |
| H. C. Church, for books, stationery, etc. | 19 47 |
| F. P. Coggeshall, for stationery, etc.... | 16 70 |
| F. P. Coggeshall & Son, for stationery, etc | 4 25 |
| G. M. Hopkins, for "Atlas of Lowell," | 12 00 |
| J. Merrill & Son, for stamp, pencils, rubber bands, etc..... | 11 05 |
| Marston & Prince, for stationery, etc... | 2 45 |
| Abel Whitney, for blank books, etc..... | 1 50 |
| Daniel Gage, for ice..... | 1 13 |
| H. B. & H. M. Bacon, for badges..... | 7 00 |
| James M. Battles, for cash paid for postage stamps, postal cards, envelopes, telegrams, express, pens, ink, ink-stand, travelling expenses, etc..... | 43 35 |
| S. P. Griffin, for cash paid for postage stamps, envelopes, wire cloth, meters, travelling expenses, etc..... | 144 29 |
| Frank O. Butterfield, for services in office of Water Board..... | 95 00 |
| John H. McAlvin, for cash paid for expenses of committee to Providence... | 21 15 |
| Samuel A. McPhetres, for cash paid Register of Deeds, for recording transfers of land..... | 1 90 |
| Lowell Gas Light Co., for gas and cement | 14 13 |
| Lowell District Telephone Co., for apparatus and telephone service..... | 74 79 |
| Lowell Horse Railroad, for tickets..... | 30 00 |
| G. W. & F. Smith, for safe..... | 100 00 |
| S. D. Butterworth, for mason work and material..... | 37 05 |
| N. T. Staples & Sons, for drain pipe, etc. | 13 87 |
| J. E. Robinson, for sinking wells near filter gallery..... | 75 00 |
| Proprietors of Urban Block, for amount of overcharge refunded..... | 31 50 |
| Wm. J. Churchill, for filing saws..... | 1 02 |

Amounts carried forward..... \$5,207 62 \$144,816 69

Amounts brought forward..... \$5,207 62 \$144,816 69

Paid for SUNDRIES :

| | | |
|---|-------|--------------|
| To E. A. & A. T. Smith, for repairing side-walks..... | 13 25 | |
| S. B. Tallant & Co., for repairing side-walk..... | 2 00 | |
| J. H. Haskell, for filing saws..... | 2 30 | |
| Daniel P. Knowlton, for teaming..... | 50 | |
| James Leach, for teaming..... | 1 00 | |
| Daniel McCarty, for teaming..... | 1 00 | |
| Boston & Lowell R. R., for transportation..... | 1 30 | |
| Nashua & Lowell R. R., for transportation..... | 1 91 | |
| Penniman & Co.'s Express, for transportation..... | 25 | |
| | | <hr/> |
| | | 5,231 13 |
| Whole Expenditure for the year..... | | \$150,047 82 |
| Balance undrawn January 1, 1880..... | | 342 39 |
| | | <hr/> |
| | | \$150,390 21 |
| | | <hr/> |

| | |
|---|----------------|
| Expended in 1870..... | \$ 95,057 00 |
| Expended in 1871..... | 624,151 66 |
| Expended in 1872..... | 560,708 40 |
| Expended in 1873..... | 349,717 87 |
| Expended in 1874..... | 233,370 63 |
| Expended in 1875..... | 275,660 78 |
| Expended in 1876..... | 221,502 24 |
| Expended in 1877..... | 163,814 28 |
| Expended in 1878..... | 158,510 15 |
| Expended in 1879..... | 150,047 82 |
| | <hr/> |
| Total expenditure to January 1, 1880..... | \$2,832,540 83 |
| Total receipts to January 1, 1880..... | 676,508 22 |
| | <hr/> |
| Net cost of Water Works to January 1, 1880..... | \$2,156,032 61 |
| | <hr/> |

STATE AID.

For Disabled Soldiers and Sailors and their Families, and for the Families of the Slain, under an act of the Legislature of the Commonwealth, chapter 172. approved April 23, 1866 :

| | | |
|--|-------------|-------------|
| Due from Commonwealth, January 1, 1879.. | \$21,385 49 | |
| | | \$21,385 49 |

RECEIPTS.

Received into the Treasury on account of
STATE AID :

| | | |
|--|-----------|-------------|
| From Patrick McManns, for overdraft..... | \$ 4 50 | |
| Patrick Sullivan, for overdraft..... | 24 00 | |
| Commonwealth, for reimbursement of State Aid..... | 12,481 31 | |
| | | \$12,509 81 |
| | | \$8,875 68 |

EXPENDITURES.

| | | |
|---|------------|-------------|
| Paid sundry persons to June 1. 1879..... | \$5,168 89 | |
| | | \$5,168 89 |
| Due from Commonwealth. January 1, 1880... | | \$14,044 57 |
| | | |

STATE AID.

For Disabled Soldiers and Sailors and their Families, and the Families of Deceased Soldiers and Sailors, under an act of the Legislature of the Commonwealth, chapter 301, approved April 30, 1879.

TRANSFER.

| | | |
|-------------------------------------|------------|------------|
| Transferred from Reserved Fund..... | \$7,000 00 | |
| | <hr/> | \$7,000 00 |
| | | <hr/> |

EXPENDITURES.

| | | |
|---|------------|------------|
| Paid sundry persons, from June 1, to December 31, 1879..... | \$5,275 75 | |
| Transferred to Aid for Indigent Soldiers and Sailors..... | 700 00 | |
| | <hr/> | 5,975 75 |
| Balance undrawn January 1, 1880..... | | 1,024 25 |
| | | <hr/> |
| | | \$7,000 00 |
| | | <hr/> |
| | | <hr/> |

For Poor and Indigent Soldiers and Sailors, under an act of the Legislature of the Commonwealth, chapter 282, approved May 17, 1878.

TRANSFER.

| | | |
|--|------------|------------|
| Transferred from Corporation Tax Account.. | \$1,337 31 | |
| | <hr/> | \$1,337 31 |
| | | <hr/> |

EXPENDITURES.

| | | |
|---|------------|------------|
| Paid sundry persons in January, 1879..... | \$1,337 31 | |
| | <hr/> | \$1,337 31 |
| | | <hr/> |

AID FOR INDIGENT SOLDIERS AND SAILORS.

For Indigent Soldiers and Sailors, under an
act of the Legislature of the Common-
wealth, chapter 252, approved April 23,
1879.

TRANSFERS.

| | | |
|-------------------------------------|------------|------------|
| Transferred from Reserved Fund..... | \$3,000 00 | |
| Transferred from State Aid..... | 700 00 | |
| | <hr/> | \$3,700 00 |

RECEIPTS.

| | | |
|---|------------|------------|
| Received from Commonwealth, for reim- bursement of Aid for 1878..... | \$5,035 56 | |
| Received from Samuel Handlen, for over draft | 2 25 | |
| | <hr/> | 5,037 81 |
| | | <hr/> |
| | | \$8,737 81 |
| | | <hr/> |

EXPENDITURES.

| | | |
|--------------------------------------|------------|------------|
| Paid sundry persons in 1879..... | \$4,475 25 | |
| | <hr/> | 4,475 25 |
| Balance undrawn January 1, 1880..... | | 4,262 56 |
| | | <hr/> |
| | | \$8,737 81 |
| | | <hr/> |

CITY DEBT.

| | | |
|---|-------------|-------------|
| Appropriated and assessed in 1879..... | \$21,000 00 | |
| Transferred from Appropriation for Interest | | |
| on City Debt..... | 1,500 00 | |
| | <hr/> | \$22,500 00 |
| | | <hr/> |

EXPENDITURES.

| | | |
|--|-------------|-------------|
| Paid Lowell Institution for Savings..... | \$21,000 00 | |
| Edward Ordway. Trustee..... | 1,500 00 | |
| | <hr/> | \$22,500 00 |
| | | <hr/> |

INTEREST ON CITY DEBT.

| | | |
|--|-------------|-----------|
| Balance undrawn January 1, 1879..... | \$ 2,601 03 | |
| Appropriated and assessed in 1879..... | 31,000 00 | |
| | <hr/> | 33,601 03 |

RECEIPTS.

| | | |
|--|------------|--------------------|
| Received into the Treasury on account of INTEREST: | | |
| From Appleton National Bank, for interest on daily balances, from July 1, 1878 to Sept. 1, 1879..... | \$1,184 92 | |
| Sundry persons, for interest on taxes.. | 1,500 14 | |
| | <hr/> | 2,685 06 |
| Transferred from National Bank Tax Ac- count..... | | 2,830 33 |
| | | <hr/> |
| | | <u>\$39,116 42</u> |

EXPENDITURES.

| | | |
|---|-------------|--------------------|
| Paid City Institution for Savings..... | \$10,515 00 | |
| Lowell Institution for Savings..... | 13,550 00 | |
| Lowell Five Cent Savings Bank..... | 2,175 00 | |
| Salem Savings Bank..... | 1,625 00 | |
| Trustees of the Estate of Thomas Nesmith..... | 1,560 00 | |
| Trustees of the Estate of Jonathan Tyler | 600 00 | |
| Edward Ordway, Trustee..... | 97 50 | |
| Appleton National Bank, on temporary loan..... | 2,897 37 | |
| | <hr/> | 33,019 87 |
| Transferred to Appropriation for City Debt.. | | 1,500 00 |
| | | <hr/> |
| Whole expenditure for the year..... | | \$34,519 87 |
| Balance undrawn January 1, 1880..... | | 4,596 55 |
| | | <hr/> |
| | | <u>\$39,116 42</u> |

CORPORATION TAX.

Balance unappropriated January 1, 1879..... \$21,513 93

\$21,513 93

RECEIPTS.

Received into the Treasury on account of
CORPORATION TAX:

From Commonwealth, on account of taxes on
Corporation Stocks, for 1878..... \$ 299 31
Commonwealth, on account of taxes on
Corporation Stocks, for 1879..... 23,342 58

23,641 89

\$45,155 82

TRANSFERS.

To Appropriation for Paupers.....\$ 2,000 00
Appropriation for Police..... 5,000 00
Appropriation for Fire Department..... 12,975 93
Appropriation for Sewers and Drains... 1,500 00
Appropriation for Printing and Advertis-
ing 342 58
Appropriation for Health..... 500 00
Appropriation for Water Works..... 5,000 00
Appropriation for Salaries..... 500 00
Appropriation for Indigent Soldiers and
Sailors..... 1,337 31

\$29,155 82
Balance unappropriated January 1, 1880.... 16,000 00

\$45,155 82

NATIONAL BANK TAX.

| | | |
|--|-------------|-------------|
| Balance unappropriated January 1, 1879..... | \$ 5,330 33 | |
| Assessed on stocks in National Banks, owned by non-residents..... | 16,099 81 | |
| | <hr/> | \$21,430 14 |

RECEIPTS.

Received into the Treasury on account of
NATIONAL BANK TAX:

| | | |
|--|------------|-------------|
| From Commonwealth, on account of National Bank Tax of 1879..... | \$3,410 97 | |
| | <hr/> | 3,410 97 |
| | | <hr/> |
| | | \$24,841 11 |
| | | <hr/> |
| | | <hr/> |

TRANSFERS.

| | | |
|---|------------|------------|
| To Appropriation for Roads and Bridges... | \$2,500 00 | |
| Appropriation for Fire Department..... | 3,558 48 | |
| Appropriation for Interest..... | 2,830 33 | |
| | <hr/> | \$8,888 81 |

EXPENDITURE.

| | | |
|---|-------------|-------------|
| Paid Commonwealth on account of National Bank Tax of 1879..... | \$15,952 30 | |
| | <hr/> | 15,952 30 |
| | | <hr/> |
| | | \$24,841 11 |
| | | <hr/> |
| | | <hr/> |

STATE TAX.

| | | |
|-----------------------|-------------|-------------|
| Assessed in 1879..... | \$10,550 00 | |
| | <hr/> | \$10,550 00 |
| | | <hr/> |

EXPENDITURE.

| | | |
|---|-------------|-------------|
| Paid Commonwealth, State Tax of 1879..... | \$10,550 00 | |
| | <hr/> | \$10,550 00 |
| | | <hr/> |

COUNTY TAX.

| | | |
|-----------------------|-------------|-------------|
| Assessed in 1879..... | \$15,241 83 | |
| | <hr/> | \$15,241 83 |
| | | <hr/> |

EXPENDITURE.

| | | |
|---|-------------|-------------|
| Paid County of Middlesex, County Tax of | | |
| 1879..... | \$15,241 83 | |
| | <hr/> | \$15,241 83 |
| | | <hr/> |

TAXES.

The amount of taxes assessed on the polls, and on the real and personal estate in the City of Lowell, for the year 1879, was as follows :

VALUATION OF, AND TAX ON, REAL AND PERSONAL PROPERTY.

| Valuation. | Rate. | Tax. |
|---|------------------------|---------------------|
| Of Real Estate, \$27,512,969 00 | Tax \$13.40 per \$1000 | |
| Personal Estate, 12,164,430 00 | | |
| Total valuation, <u>\$39,677,399 00</u> | | \$531,679 39 |
| Number of polls, 12,598, at \$1.85 each..... | | 23,306 30 |
| Bank Tax asessed on shares of stock which were not included in the valuation of the city..... | | 16,099 81 |
| Total amount of taxes assessed in 1879..... | | <u>\$571,085 50</u> |

APPROPRIATED AND ASSESSED IN 1879.

| | |
|--|---------------------|
| For City Appropriations..... | \$519,500 00 |
| State Tax..... | 10,550 00 |
| County Tax..... | 15,241 83 |
| Tax on shares in National Banks not in- cluded in the valuation of the City.. | 16,099 81 |
| Overlays on property..... | 9,535 56 |
| Overlays on polls..... | 158 30 |
| | <u>\$571,085 50</u> |

TAXES.

| | Due Jan. 1, 1879, and assessed in '79 | Abated in 1879. | Collected in 1879. | Due Jan. 1, 1880. |
|--------------|--|-----------------|--------------------|-------------------|
| Tax of 1877, | \$ 4,114 65 | \$4,109 22 | \$ 5,43 | |
| Tax of 1878, | 24,639 86 | 198 23 | 21,350 53 | \$ 3,091 10 |
| Tax of 1879, | 571,085 50 | 907 56 | 537,795 46 | 32,382 48 |
| Totals, | \$599,840 01 | \$5,215 01 | \$559,151 42 | \$35,473 58 |

ABATEMENT OF TAXES.

| | | |
|---|------------|-------------|
| Balance unappropriated January 1, 1879..... | \$9,542 60 | |
| Overlays assessed in 1879..... | 9,693 86 | |
| | | <hr/> |
| | | \$19,236 46 |

ABATEMENTS.

| | | |
|---|------------|-------------|
| Amount abated by Assessors, on Taxes of | | |
| 1877..... | \$4,109 22 | |
| Amount abated by Assessors, on Taxes of | | |
| 1878..... | 198 23 | |
| Amount abated by Assessors, on Taxes of | | |
| 1879..... | 907 56 | |
| | | <hr/> |
| | | \$ 5,215 01 |
| Balance unappropriated January 1, 1880..... | | 14,021 45 |
| | | <hr/> |
| | | \$19,236 46 |

TEMPORARY LOAN.

RECEIPTS.

| | | |
|---|-----------------------------|-----------------------------|
| Borrowed of Appleton National Bank..... | \$250,000 00 | |
| | <u> </u> | \$250,000 00 |
| | | <u> </u> |

PAYMENT.

| | | |
|-------------------------------------|-----------------------------|-----------------------------|
| Paid to Appleton National Bank..... | \$250,000 00 | |
| | <u> </u> | \$250,000 00 |
| | | <u> </u> |

SINKING FUND.

FOR THE REDUCTION OF THE WATER DEBT.

| | | |
|--|-----------------------------|-----------------------------|
| Appropriated and assessed in 1879..... | \$25,000 00 | |
| | <u> </u> | \$25,000 00 |
| | | <u> </u> |
| Invested at interest..... | \$25,000 00 | |
| | <u> </u> | \$25,000 00 |
| | | <u> </u> |

SINKING FUND.

FOR THE REDUCTION OF THE LOAN OF 1876.

| | | |
|--|------------|------------|
| Appropriated and assessed in 1879..... | \$4,000 00 | |
| | <hr/> | \$4,000 00 |
| | | <hr/> |
| Invested at interest..... | \$4,000 00 | |
| | <hr/> | \$4,000 00 |
| | | <hr/> |

CARNEY MEDAL FUND.

| | | | |
|--|--|----------|----------------------|
| *Received of James G. Carney, Esq., in 1858 and 1859, the amount of two hundred dollars, which is to remain a perpetual debt of the City forever; the interest to be applied in payment for the “Carney Medals,” to the departments of the High School (annually,) | | \$200 00 | |
| | | <hr/> | \$200 00 |
| Undrawn January 1. 1880. | | | <hr/> <hr/> \$200 00 |

*One hundred dollars was donated August 24, 1858, and accepted by the City Council September 14, 1858, and one hundred dollars additional, July 16, 1859, and accepted July 26, 1859. For the information of the citizens of Lowell, the Auditor respectfully refers them to the “Annual Report of the School Committee,” for the year 1859, where all the correspondence between the donor and the recipient may be found.

BALANCES, APPROPRIATIONS, RECEIPTS, AND EXPENDITURES, IN 1879.

| Appropriations. | Balances Jan. 1, 1879. | Appropriations. | Transfers to Sundry Accounts. | Receipts. | Total Appropriations. | Transfers and Expenditures | Trn's from Sundry Accounts. | Expenditures | Expenditure in excess of Receipts. | Balances Jan. 1, 1880. |
|------------------|---------------------------|-----------------|-------------------------------------|------------|-----------------------|-------------------------------|-----------------------------------|--------------|--|---------------------------|
| Schools..... | \$12,629.46 | \$115,000.00 | ..... | \$ 380.86 | \$128,010.32 | \$125,429.68 | ..... | \$125,429.68 | \$125,048.82 | \$2,580.64 |
| School Houses.. | 2,241.51 | 20,000.00 | ..... | 1,362.00 | 23,603.51 | 17,603.74 | ..... | 17,603.74 | 16,246.74 | 5,994.77 |
| Roads & Bridges | 3,786.75 | 60,000.00 | \$17,500.00 | 22,116.57 | 103,403.32 | 103,291.65 | ..... | 103,291.65 | 81,175.08 | 111.67 |
| Reserved Fund. | 7,669.52 | ..... | ..... | 39,301.97 | 46,971.49 | 45,398.94 | \$25,000.00 | 20,398.94 | 6,096.97 | 1,572.56 |
| Paupers..... | 2,583.82 | 32,000.00 | 2,000.00 | 11,210.86 | 47,794.68 | 46,461.43 | ..... | 46,461.43 | 35,250.57 | 1,333.25 |
| Police..... | 1,181.98 | 40,000.00 | 5,000.00 | 4,380.86 | 50,562.84 | 49,436.43 | ..... | 49,436.43 | 45,055.57 | 1,126.41 |
| Fire Department | 997.61 | 48,000.00 | 16,534.41 | 1,061.25 | 66,593.27 | 65,198.12 | ..... | 65,198.12 | 64,136.87 | 1,395.15 |
| Sewers & Drains | 614.81 | 56,000.00 | 1,500.00 | 9,181.14 | 67,295.95 | 66,819.82 | ..... | 66,819.82 | 57,638.68 | 476.13 |
| Commons | 4.37 | 2,500.00 | ..... | 253.50 | 2,757.87 | 2,403.51 | ..... | 2,403.51 | 2,150.01 | 354.36 |
| Printing and Ad- | | | | | | | | | | |
| vertising | 639.38 | 2,000.00 | 342.58 | ..... | 2,981.96 | 2,703.86 | ..... | 2,703.86 | 2,703.86 | 278.10 |
| Lighting..... | 3,307.98 | 16,000.00 | ..... | 14.06 | 19,322.04 | 17,001.67 | ..... | 17,001.67 | 16,987.61 | 2,320.37 |
| Repairs of Pub- | | | | | | | | | | |
| lie Buildings.. | 3,256.58 | 3,500.00 | ..... | 2,093.44 | 8,850.02 | 6,953.33 | ..... | 6,953.33 | 4,859.89 | 1,896.69 |
| City Library.... | 95.36 | 1,500.00 | ..... | 3,187.64 | 4,783.00 | 4,507.26 | ..... | 4,507.26 | 1,319.62 | 275.74 |
| Salaries..... | 2,371.96 | 15,000.00 | 500.00 | ..... | 17,871.96 | 16,833.75 | ..... | 16,833.75 | 16,833.75 | 1,038.21 |
| Health | 362.52 | 2,000.00 | 500.00 | ..... | 2,862.52 | 2,772.21 | ..... | 2,772.21 | 2,772.21 | 90.31 |
| Water Works... | 10,204.87 | 25,000.00 | 5,000.00 | 110,185.34 | 150,390.21 | 150,047.82 | ..... | 150,047.82 | 39,862.48 | 342.39 |
| State Aid (Laws | | | | | | | | | | |
| of 1879)..... | ..... | ..... | 7,000.00 | ..... | 7,000.00 | 5,975.75 | 700.00 | 5,275.75 | 5,975.75 | 1,024.25 |
| State Aid for | | | | | | | | | | |
| Poor and In- | | | | | | | | | | |
| digent Sol- | | | | | | | | | | |
| diers and Sail- | | | | | | | | | | |
| ors..... | ..... | ..... | 1,337.31 | ..... | 1,337.31 | 1,337.31 | ..... | 1,337.31 | 1,337.31 | ..... |
| Aid for Poor and | | | | | | | | | | |
| Indigent Sol- | | | | | | | | | | |
| diers and Sail- | | | | | | | | | | |
| ors (Laws of | | | | | | | | | | |
| 1879)..... | ..... | ..... | 3,700.00 | 5,037.81 | 8,737.81 | 4,475.25 | ..... | 4,475.25 | ..... | 4,262.56 |

| | | | | | | | | |
|-----------------------|-------------|--------------|-------------|--------------|----------------|-------------|--------------|-------------|
| City Debt..... | ..... | 21,000.00 | 1,500.00 | ..... | 22,500.00 | ..... | 22,500.00 | ..... |
| Interest | 2,601.03 | 31,000.00 | 2,830.33 | ..... | 34,519.87 | ..... | 31,834.81 | 4,596.55 |
| Corporation Tax | 21,513.93 | ..... | ..... | 2,685.06 | 29,116.42 | 1,500.00 | 5,513.93 | 16,000.00 |
| Nat. Bank Tax | 5,330.33 | ..... | ..... | 23,641.89 | 45,155.82 | 29,155.82 | ..... | ..... |
| State Tax..... | ..... | 16,099.81 | ..... | 3,410.97 | 24,841.11 | 8,888.81 | 21,430.14 | ..... |
| County Tax..... | ..... | 10,550.00 | ..... | ..... | 10,550.00 | ..... | 10,550.00 | ..... |
| Abatem't Taxes. | ..... | 15,241.83 | ..... | ..... | 15,241.83 | ..... | 15,241.83 | ..... |
| Temporary Loan | 9,542.60 | 9,693.86 | ..... | ..... | 19,236.46 | ..... | ..... | ..... |
| Water Loan | ..... | ..... | ..... | 250,000.00 | 250,000.00 | ..... | 5,215.01 | 14,021.45 |
| Sinking Fund. | ..... | 25,000.00 | ..... | ..... | 25,000.00 | ..... | 25,000.00 | ..... |
| Sinking Fund | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| for Loan of | ..... | 4,000.00 | ..... | ..... | 4,000.00 | ..... | 4,000.00 | ..... |
| 1876..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Carney Medal | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fund..... | 200.00 | ..... | ..... | ..... | 200.00 | ..... | ..... | 200.00 |
| | \$91,136.37 | \$571,085.50 | \$65,244.63 | \$489,505.22 | \$1,216,971.72 | \$65,244.63 | \$666,737.51 | \$61,291.55 |

Deduct excess of Receipts over Expenditures in Aid for Poor and Indigent Soldiers and Sailors

| | |
|---|--------------|
| Deduct amount due for State Aid (Laws of 1866)..... | \$666,174.95 |
| Deduct amount due for Taxes..... | \$14,044.57 |
| | 35,473.58 |
| | 49,518.15 |

Balance of Appropriations January 1, 1880.....
 *Abated by Assessors of Taxes.

\$11,773.40

DUE FROM THE CITY ON WATER LOANS.

DECEMBER 31, 1879.

| Date of Notes and Bonds. | To whom payable. | Amount. | Per cent | Interest, when due. | Annual Interest. | Instalments, when due. | Amount of Instalments. |
|--------------------------|---|--------------|----------|---------------------|------------------|------------------------|------------------------|
| 1870, Nov. 1, | Merchants' National Bank.. | \$500,000.00 | 6 | May 1 and Nov. 1, | \$30,000.00 | 1890, Nov. 1, | \$500,000.00 |
| 1870, Nov. 1, | Railroad National Bank..... | 150,000.00 | 6 | May 1 and Nov. 1, | 9,000.00 | 1890, Nov. 1, | 150,000.00 |
| 1870, Nov. 1, | City Institution for Savings. | 100,000.00 | 6 | May 1 and Nov. 1, | 6,000.00 | 1890, Nov. 1, | 100,000.00 |
| 1870, Nov. 1, | Mechanics' Savings Bank... | 50,000.00 | 6 | May 1 and Nov. 1, | 3,000.00 | 1890, Nov. 1, | 50,000.00 |
| 1870, Nov. 1, | Lowell Five Cent Sav. Bank | 46,000.00 | 6 | May 1 and Nov. 1, | 2,760.00 | 1890, Nov. 1, | 46,000.00 |
| 1870, Nov. 1, | Worcester County Institution for Savings..... | 30,000.00 | 6 | May 1 and Nov. 1, | 1,800.00 | 1890, Nov. 1, | 30,000.00 |
| 1870, Nov. 1, | Marlborough Savings Bank, Marlborough..... | 10,000.00 | 6 | May 1 and Nov. 1, | 600.00 | 1890, Nov. 1, | 10,000.00 |
| 1870, Nov. 1, | Lowell Water Loan Sinking Fund | 4,000.00 | 6 | May 1 and Nov. 1, | 240.00 | 1890, Nov. 1, | 4,000.00 |
| 1870, Nov. 1, | William Shepard..... | 227,000.00 | 6 | May 1 and Nov. 1, | 13,620.00 | 1890, Nov. 1, | 227,000.00 |
| 1870, Nov. 1, | Brewster, Sweet & Co | 160,000.00 | 6 | May 1 and Nov. 1, | 9,600.00 | 1890, Nov. 1, | 160,000.00 |
| 1870, Nov. 1, | G. T. Williams | 8,000.00 | 6 | May 1 and Nov. 1, | 480.00 | 1890, Nov. 1, | 8,000.00 |
| 1870, Nov. 1, | R. L. Day & Cobb..... | 5,000.00 | 6 | May 1 and Nov. 1, | 300.00 | 1890, Nov. 1, | 5,000.00 |
| 1870, Nov. 1, | Frederick Bailey..... | 3,000.00 | 6 | May 1 and Nov. 1, | 180.00 | 1890, Nov. 1, | 3,000.00 |
| 1870, Nov. 1, | E. G. Woodman..... | 2,000.00 | 6 | May 1 and Nov. 1, | 120.00 | 1890, Nov. 1, | 2,000.00 |

| | | | | | | |
|---|-----------------------|--------------|----------------------|---------------------|----------------|-----------------------|
| 1870, Nov. 1, Lucian H. Reed..... | 2,000.00 6 | Bonds, | May 1 and Nov. 1, | 120.00 | 1890, Nov. 1, | 2,000.00 |
| 1870, Nov. 1, John F. Kimball..... | 1,000.00 6 | Bonds, | May 1 and Nov. 1, | 60.00 | 1890, Nov. 1, | 1,000.00 |
| 1870, Nov. 1, Weld Spaulding | 1,000.00 6 | Bonds, | May 1 and Nov. 1, | 60.00 | 1890, Nov. 1, | 1,000.00 |
| 1870, Nov. 1, James Harper..... | 1,000.00 6 | Bonds, | May 1 and Nov. 1, | 60.00 | 1890, Nov. 1, | 1,000.00 |
| 1871, May 1, Lowell Institut'n for Savings | 200,000.00 6 | City's Note, | May 1 and Nov. 1, | 12,000.00 | 1891, May 1, | 200,000.00 |
| 1873, June 14 Lowell Institut'n for Savings | 100,000.00 6 10 | City's Note, | June 14 and Dec. 14, | 6,600.00 | 1893, June 14, | 100,000.00 |
| 1874, Oct. 14 City Institution for Savings. | 50,000.00 6 1 | City's Note, | Apr. 14 and Oct. 14, | 3,250.00 | 1894, Oct. 14, | 50,000.00 |
| 1874, Nov. 12 Lowell Institut'n for Savings | 100,000.00 6 1 | City's Note, | May 12 and Nov. 12, | 6,500.00 | 1894, Nov. 12, | 100,000.00 |
| 1876, June 15 Commonwealth of Massachu- setts..... | 50,000.00 5 | City's Note, | June 15 and Dec. 15, | 2,500.00 | 1886, June 15, | 50,000.00 |
| | <u>\$1,800,000 00</u> | | | <u>\$108 850 00</u> | | <u>\$1,800,000 00</u> |

NOTES DUE FROM THE CITY.

DECEMBER 31, 1979.

| Date of Notes. | To whom payable. | Amount. | Per Cent. | Interest, when due. | Annual Interest. | Instalments, when due. | Amount of Instalment. |
|-----------------|---------------------------------|------------|----------------------------------|--------------------------|------------------|------------------------|-----------------------|
| 1852, Sept. 1, | Lowell Institution for Savings, | 30,000.00 | 5 | March 1 and Sept. 1 | \$1,500.00 | 1882, September 1, | \$ 30,000.00 |
| 1862, Sept. 13, | Lowell Five Cent Savings Bank, | 10,000.00 | 5½ | March 13 and Sept. 13, | 550.00 | 1882, Sept. 13, | 10,000.00 |
| 1862, Nov. 3, | City Institution for Savings, | 30,000.00 | 5½ | May 3 and November 3, | 1,650.00 | 1887, November 3, | 30,000.00 |
| 1864, April 1, | City Institution for Savings. | 38,000.00 | 5½ | April 1 and October 1, | 1,995.00 | 1884, April 1, | 38,000.00 |
| 1865, Jan. 13, | City Institution for Savings, | 50,000.00 | 6 | January 13 and July 13, | 3,000.00 | 1880, January 13, | 50,000 00 |
| 1865, Mar. 22, | Lowell Institution for Savings, | 37,000.00 | 6 | March 22 and Sept. 22, | 2,220.00 | 1880, March 22, | 37,000.00 |
| 1870, April 1, | City Institution for Savings, | 20,000.00 | 6 ⁴⁵ / ₁₀₀ | April 1 and October 1, | 1,290.00 | 1881, October 1, | 20,000.00 |
| 1870, June 1, | City Institution for Savings. | 20,000.00 | 6 ⁴⁵ / ₁₀₀ | June 1 and December 1, | 1,290.00 | 1883, October 1, | 20,000.00 |
| 1870, Aug. 1, | City Institution for Savings, | 20,000.00 | 6 ⁴⁵ / ₁₀₀ | February 1, and Aug. 1, | 1,290.00 | 1885, October 1, | 20,000.00 |
| *1871, Mar. 6, | Bequest of Thomas Nesmith, | 25,000.00 | 6 | March 6 and Sept. 6. | 1,500.00 | Perpetual Debt, | 25,000.00 |
| †1871, Apr. 10, | Bequest of Thomas Nesmith, | 1,000.00 | 6 | April 10 and October 10, | 60.00 | Perpetual Debt, | 1,000.00 |
| 1872, Aug. 5, | Salem Savings Bank, | 25,000.00 | 6½ | February 5 and August 5. | 1,625.00 | 1882, August 5, | 25,000.00 |
| 1873, Oct. 17, | Lowell Institution for Savings, | 30,000.00 | 7 | April 17 and October 17, | 2,100.00 | 1883, October 17, | 30,000.00 |
| 1874, Aug. 7, | Lowell Institution for Savings, | 100,000.00 | 6½ | February 7 and August 7, | 6,500.00 | 1894, August 7, | 100,000.00 |

| | | | | | | | |
|----------------|---------------------------------|----------------|----|----------------------------|--------------|------------------------|----------------|
| 1874, Nov. 25, | Lowell Five Cent Savings Bank, | 25,000.00 | 6½ | May 25 and November 25, | 1,625.00 | 1894, Nov. 25, | 25,000.00 |
| 1875, July 1, | Lowell Institution for Savings, | 10,000.00 | 6 | January 1 and July 1, | 600.00 | 1885, July 1, | 10,000.00 |
| ‡1878, May 10, | Bequest of Jonathan Tyler, | 10,000.00 | 6 | May 10 and November 10, | 600.00 | Perpetual debt, | 10,000.00 |
| | Amount of city debt (ordinary) | \$ 481,000.00 | | Int. on ordinary city debt | \$29,395.00 | | \$ 481,000.00 |
| | Amount of Water Loans | 1,800,000.00 | | Interest on Water Loans, | 108,850.00 | Amount of Water Loans, | 1,800,000.00 |
| | Total amount of city debt, | \$2,281,000.00 | | Total int. on city debt, | \$138,245.00 | | \$2,281,000.00 |

*Interest on the same (for the poor).

†Interest on the same (High Street Church).

‡Interest on the same (for the poor).

DEBTS DUE THE CITY,

JANUARY 1, 1880.

| | | |
|--|-------------|-------------|
| For Taxes of 1878..... | \$ 3,091 10 | |
| Taxes of 1879 | 32,382 48 | |
| Sidewalk assessments..... | 3,619 73 | |
| Sewer assessments..... | 9,129 10 | |
| Water rates, service pipe, etc..... | 8,351 77 | |
| Execution against Horace Howard.... | 48 21 | |
| From sundry persons, book accounts | 327 84 | |
| Commonwealth, State Aid..... | 19,320 32 | |
| Commonwealth, Aid for Poor and Indi- gent Soldiers and Sailors..... | 3,574 93 | |
| Commonwealth, rent of Armories..... | 800 00 | |
| | <hr/> | \$80,645 48 |

REAL ESTATE OWNED BY THE CITY.

| | |
|--|--------------|
| City Government building..... | \$ 30,000 00 |
| Huntington and Jackson Halls..... | 41,200 00 |
| Market-house | 56,000 00 |
| City Scales, rear of Market-house..... | 1,000 00 |
| Shed, back of Market-house..... | 150 00 |
| High school-house on Ann and Kirk streets.....✓ | 43,000 00 |
| Bartlett school-house on Clark street.....✓ | 13,000 00 |
| Edson school-house on Highland street.....✓ | 17,400 00 |
| Colburn school-house on Lawrence street.....✓ | 21,000 00 |
| Franklin school-house on Middlesex and Branch streets..✓ | 14,000 00 |
| Moody school-house on East Merrimack street.....✓ | 12,000 00 |
| Green school-house on Merrimack street.....✓ | 105,800 00 |
| Mann school-house on Lewis street.....✓ | 13,500 00 |
| Varnum school-house on Myrtle street.....✓ | 17,000 00 |
| Sherman school-house on Powell street.....✓ | 7,000 00 |
| Primary school-house on Merrimack and Race streets... | 3,400 00 |
| Primary school-house on Middlesex and Elliott streets.. | 6,000 00 |
| Primary school-house and ward room on Church street.. | 5,000 00 |
| Primary school-house on School street..... | 6,700 00 |
| Primary school-house on High street..... | 3,600 00 |
| Primary school-house on Paige street..... | 2,300 00 |
| Primary school-house on Carter street..... | 7,500 00 |
| Primary school-house on Charles street..... | 2,500 00 |
| Primary school-house on Fayette street..... | 5,500 00 |
| Primary school-house on Rock street..... | 2,100 00 |
| Primary school-house on Cabot street..... | 3,250 00 |
| Primary school-house on West Sixth street..... | 10,038 00 |
| Primary school-house on River street..... | 5,500 00 |
| Primary school-house on Ames and Lawrence streets.... | 7,700 00 |
| Primary school-house on Dover street..... | 7,700 00 |
| Primary school-house on Agawam street..... | 6,000 00 |
| Primary school-house on London street..... | 3,255 00 |
| Primary school-house on Chapel street..... | 5,400 00 |
| Primary school-house on Central and Chapel streets.... | 9,000 00 |
| Primary school-house on Howard street..... | 4,000 00 |
| Primary school-house on Worthen street..... | 26,000 00 |
| Primary school-house and ward room on Central street.. | 21,200 00 |
| Primary school-house on Common street..... | 34,000 00 |
| Primary school-house on High street..... | 15,000 00 |

Amount carried forward.....\$594,693 00

| | |
|--|--------------|
| <i>Amount brought forward</i> | \$594,693 00 |
| Primary school-house on Varnum avenue..... | 500 00 |
| Primary school-house on Mammoth road..... | 3,000 00 |
| Primary school-house at Middlesex village..... | 3,000 00 |
| Hose carriage-house and ward room, Fayette street..... | 3,100 00 |
| Hook and ladder-house, ward room, carpenter's shop, and armory, Middle street..... | 21,000 00 |
| Double engine-house and stable on Middle street..... | 14,250 00 |
| Engine-house and stable, Gorham street..... | 13,200 00 |
| New engine-house and stable on Branch street..... | 17,784 00 |
| New engine-house and stable on Fourth street..... | 11,468 00 |
| Engine-house, Ayer's city..... | 500 00 |
| Hose carriage-house, Fletcher and Cross streets..... | 3,500 00 |
| Hose carriage-house on Central street..... | 3,700 00 |
| Hose carriage and engine-house, Warren street..... | 1,800 00 |
| Alms-house and farm..... | 25,000 00 |
| House for Chaplain at City Farm..... | 2,500 00 |
| New three-story brick house at the Poor Farm, for aged people..... | 2,400 00 |
| Pest-house at City Farm..... | 2,500 00 |
| Land and buildings on Kirk street..... | 16,000 00 |
| Land and buildings on Adams, Fletcher, Lagrange and Cross streets..... | 50,329 00 |
| Public landing, rear of Market House, exclusive of the landing set off by the Locks and Canals..... | 1,250 00 |
| Lot of land on Chelmsford street..... | 1,600 00 |
| Lot of land on First street..... | 190 00 |
| Lot of land on Fletcher and Whiting streets..... | 1,133 00 |
| Lot of land on Middle street..... | 10,600 00 |
| Lot of land on Tenth street..... | 5,000 00 |
| North Common..... | 17,000 00 |
| South Common..... | 23,300 00 |
| Mount Vernon Park..... | 2,000 00 |
| Belvidere Park..... | 2,300 00 |
| House and land on Wilder street..... | 5,100 00 |
| | <hr/> |
| | \$859,697 00 |

WATER WORKS.

| | |
|---|----------------|
| The real estate and personal property belonging to the city, occupied and used by the Water Works, net cost to January 1, 1880..... | \$2,156,032 61 |
|---|----------------|

BURIAL GROUNDS OWNED BY THE CITY.

- No. 1 Burial ground, on School street.
- No. 2 Burial ground, on Gorham street.
- Edson Cemetery, on Gorham street.

PERSONAL PROPERTY OWNED BY THE CITY.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF HORACE
G. HOLDEN, SUPERINTENDENT OF WATER WORKS, JANUARY 1,
1880.

CAST-IRON PIPE AND SPECIAL CASTINGS.

| DIAMETER IN INCHES..... | 4 | 6 | 8 | 12 | 16 | 20 | 24 | 30 | 10 |
|-----------------------------------|------|------|------|----|------|----|------|------|------|
| Lengths..... | .... | .... | 111 | 82 | 12 | 21 | 10 | 15 | .... |
| Cut Pieces, total length in feet. | .... | .... | 20 | 25 | .... | 60 | .... | 32 | .... |
| Curves, total number..... | 4 | 4 | 9 | 8 | 1 | 12 | 6 | 6 | .... |
| Sleeves | 17 | 22 | 20 | 4 | 2 | 2 | 10 | 5 | 6 |
| Half Sleeves, .. .. . | .... | .... | .... | 17 | 4 | 14 | .... | 6 | .... |
| Caps. | 6 | 1 | 34 | 16 | 4 | 1 | 1 | .... | .... |

| | 4x4 | 4x6 | 6x6 | 6x8 | 6x12 | 6x16 | 8x8 | 8x10 | 8x12 | 10x12 | 12x12 | 12x16 | 16 |
|----------|------|------|------|-----|------|------|------|------|------|-------|-------|-------|----|
| 4-Ways, | 6 | .... | 9 | 6 | 8 | 1 | 6 | 1 | 2 | ..... | 2 | 2 | 1 |
| Reducers | .... | 3 | .... | 6 | 6 | .... | .... | .... | 3 | ..... | 3 | .. | |
| 3-Ways, | 1 | .... | 1 | 5 | 5 | 1 | 7 | .... | 9 | ..... | 1 | ..... | .. |

Wrought-Iron Pipe.—50 feet $\frac{1}{4}$ -inch pipe, 50 feet $\frac{1}{2}$ -inch pipe, 550 feet $\frac{3}{4}$ -inch pipe, 500 feet $\frac{3}{4}$ -inch second-hand pipe, 300 feet 1-inch pipe, 50 feet $1\frac{1}{2}$ -inch pipe, 180 feet 2-inch pipe. One post hydrant, 1 flush hydrant, 17 hydrant-box covers, 13 hydrant-box frames, 1 hydrant box, 2 4-inch stop gates, 3 gate-box frames, 3 gate-box covers, 6 gate covers, old style, 15 gate-boxes. **Lead Connections.**—2 1-inch, 8 $\frac{3}{4}$ -inch, 18 $\frac{5}{8}$ -inch, 1 1-inch for cement pipe, 3 $\frac{5}{8}$ -inch for cement pipe. **Corporation Cocks.**—54 $\frac{3}{4}$ -inch, 2 1-inch, 14 $\frac{5}{8}$ -inch, 9 1-inch for cement pipe, 30 $\frac{3}{4}$ -inch for cement pipe, 12 $\frac{5}{8}$ -inch for cement pipe. **Stop and Waste Cocks.**—23 $\frac{3}{4}$ -inch, 18 $\frac{3}{4}$ -inch, old style, 11 1-inch. **Solder Nipples.**—55 $\frac{5}{8}$ -inch, 13 1-inch, 23 $\frac{3}{4}$ -inch. **Unions.**—42 1-inch, 34 $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ -inch. **Sockets.**—15 $\frac{3}{4}$ -inch, 9 $\frac{5}{8}$ -inch. **Turns.**—3 2-inch, 1 2 to 1 inch, 2 $1\frac{1}{2}$ -inch, 9 1 to $\frac{3}{4}$ -inch, 65 1-inch, 19 1-inch, $\frac{1}{8}$ ton, 43 $\frac{3}{4}$ -inch, 3 $\frac{3}{4}$ to $\frac{1}{2}$ inch. **Plugs.**—36, 1-inch, 10 $\frac{1}{2}$ -inch. **Couplings.**—27 reducing brass, 1 2 to 1-inch, 5 1-inch, 3 $1\frac{1}{2}$ -inch, 6 1 to $\frac{3}{4}$ -inch, 12 2-inch, 110 $\frac{3}{4}$ -inch. **Caps.**—7 1-inch, 2 $\frac{3}{4}$ -inch. **3-Ways.**—7 2 x 1-inch, 5 2 x $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ x $\frac{3}{4}$ -inch, 15 1 x $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ -inch, 2 $1\frac{1}{2}$ x $\frac{3}{4}$ -inch, 38 1-inch, 28 $\frac{3}{4}$ -inch, 5 $\frac{1}{2}$ -inch. **4-Ways.**—1 1 x $\frac{3}{4}$ -inch, 24 1-inch, 73 $\frac{3}{4}$ -inch. **Sundries.**—Lumber for 218 sidewalk boxes, 2 derricks, shear pole, $2\frac{1}{2}$ cords hard pine wood, 1 cord logs for blasting purposes, 1 ton stove coal, 1 keg 10^d nails, 350 lbs. iron bolts, 1 keg spikes, 12 pair pipe tongs, 2 pipe-cutters, 2 tapping machines, 1 dry, 728 lbs. steel in drills, 20 lbs. bar steel, 15 assorted gate screws, 2 trowels, 29 iron hydrant valves, 25 rubber packings for hydrant, 3 syphons with pipe attached, 100 feet canvas hose, 1 bundle of sand-bags, 40 lbs. cotton waste, 4 pairs rubber boots, 70 feet rubber hose, 1 iron tube-pump and boring machine, 25 iron lug-straps, 8 rubber connections, 35 lbs. old rubber, 1 fore-plane, 3 iron tooth rakes, 1 grindstone, 3 nail hammers, 2 paving hammers, 2 stone hammers, 6 calking hammers, 10 striking hammers, 2 sledge hammers, 3 large lead ladles, 2 small lead ladles, 7 galvanized iron pails, 3 sets of blocks, 1 fall rope, 6 sling ropes, 4 draught chains, 1 wrapping chain, 270 sidewalk box caps, 2 saw horses, 2 buck-saws, 2 hand-saws, 60 lbs. lead, 75 lbs. lead pipe cut, 2 coils $\frac{3}{4}$ -inch lead, 2 coils $\frac{3}{8}$ -inch, 2 coils 1-inch, 1 framing square, 1 framing chisel, 2 ice chisels, 2 square-pointed shovels, 22 second-hand shovels, 2 snow shovels, 20 assorted wooden plugs, 8 lbs. shims and wedges, 5 tool boxes, 1 tin pump, 1 copper suction pump, 1 force pump, 1 zinc pump, 1 hose reel, 1 street combination fountain, 5 fountain dippers, 15 feet fountain dippers' chain, 4 paving planks, 3 paving mauls, 15 feet drain file, 2 axes, 2 hand axes, 2 root axes, 10 rammers, $\frac{1}{2}$ bbl.

cement, $\frac{1}{2}$ bbl. white clay, 1 dualin pot, 2 lbs. dualin, 50 feet fuse, 6 blasting spoons, 1 apparatus for testing pipe, 1 apparatus for testing meters, 1 bit stock, 1 foot lathe, 9 assorted files, 1 copper goose-neck and brass reducer, 2 water tanks, 1 coal stove, 5 work benches, 25 assorted wrenches, 7 monkey-wrenches, 1 wagon wrench, 3 screw-drivers, 12 bands for main pipe, 1 portable blacksmith forge, 2 sprinkling pots, 4 dies, 3 die plates, 4 lbs. old brass, 100 lbs. extra brass hinges, 3 soldering furnaces, 2 bbls. charcoal, 1 cement-lining machine, 1 counter scale, 1 platform scale, 13 assorted screens, with fixtures, 1 desk, 20 new pick-handles, 6 iron side-walk boxes, 50 lbs. solder, 15 lanterns, 3 lead pots, 1 10-gallon kerosene can, 1 8-gallon can, 1 5-gallon can, 1 2-gallon can, 2 1-gallon cans, 4 $\frac{1}{2}$ -gallon cans, 1 2-qt. tin measure, 1 4-qt. wood measure, 4 crowbars, 2 steel prodding bars, 3 nipping bars, 4 soldering irons, 2 irons wood mallets, 4 cane-seat chairs, 1 40-foot leather belt, 34 second-hand picks, 1 set blacksmith tools, 1 blacksmith shop, 1 workshop, 1 carriage house, 1 stable, 1 shed for storage, 1 grain box, 1 horse, 2 harnesses, 1 canvas horse-cover, 1 rubber horse-cover, 2 horse blankets, 2 surcingles, 2 wagons, $\frac{1}{2}$ ton hay, 1 manure fork, 2 hay forks, 1 horse card, 1 curry-comb, 1 brush, 2 dusters, 1 broom, 2 halters, 1 wagon-jack, 600 lbs. wrought iron, 25 lbs. assorted nuts, 5 hanging irons for pipe under bridges, 1 punng, 2 3-foot iron screws, 30 lbs. assorted nuts, 15 wheelbarrows, 1 M. feet good timber, 500 feet boards and planks, 25 M. old lumber, 1 sieve, 1 hoe, 18 calking sets, 4 yarning irons, 6 pipe wedges, 3 spades, 4 pipe vises, 1 bucket for testing meters, 8 cold chisels, 3 bits, 2 portable closets, 2 Worthington meters, $\frac{5}{8}$ -inch, 2 rakes.

TOOLS AT FILTER INLET.

2 iron-tooth rakes, 11 shovels, 1 rammer, 1 axe, 2 ice-chisels, 1 gate wrench, 1 nail hammer, 1 pick, 2 brooms, 1 wheelbarrow.

TOOLS AT RESERVOIR.

1 grindstone, 2 iron rakes, 3 forks, 6 shovels, 1 sod cutter, 1 axe, 1 saw, 2 hoes, 2 scythes, 2 sneaths, 1 grass hook, 1 wheelbarrow, 1 coil rope, 2 spare screws, 2 thermometers, 1 lantern, 1 snow shovel, 1 iron bar.

PROPERTY IN WATER BOARD AND SUPERINTENDENT'S OFFICE.

23 chairs, 1 letter press, 2 stools, 3 desks, with draws, 3 standing desks, 3 office tables, 1 book case, 1 clock, 3 thermometers, 5 ink-stands, 1 water cooler, 1 tumbler, 4 maps of Lowell, 1 map of water

distributing pipes, 3 waste baskets, 3 mats, 3 hat racks, 6 spittoons, 9 assorted wrenches, 1 tin match safe, 1 lantern, 12 sticks sealing wax, 1 water gauge, 2 screw drivers, 2 monkey wrenches, 2 files, 2 hydrant dippers, 1 safe, 1 key rack, 3 picks, 1 steel prodding-bar, 1 shovel, 1 atlas of Lowell, 1 atlas of Middlesex County.

PROPERTY AND TOOLS AT ENGINE HOUSE.

1 vise, 1 work bench, 8 sets brasses for engine, 2 sets differential blocks, 1 piece 2-inch rope, 2 sets fire irons, 1 brass hydrant, 3 axes, 11 wrenches, 2 jack-screws, 1 hand-saw, 26 cold chisels, 1 ratchet drill, 1 socket drill, 3 calking chisels, 1 barometer, 2 thermometers, 1 water cooler, 1 desk, 1 indicator, 1 oil cupboard, 2 oil dishes, 1 screen for well, 1 platform scale, 4 crowbars, 64 feet $\frac{5}{8}$ -inch chain, 16 eye bolts, 1 truck, 1 key wrench, 1 wrench for air pump, 1 iron wheelbarrow, 2 hand-saws, 1 buck saw, 1 saw horse, 2 gas lamps, 1 high grade thermometer, 4 brass bolts, $1\frac{1}{2}$ -inch diameter, for pump valves, 5 spare pump valves, 5 sets spare weights for valves, 11 socket wrenches, 7 pair gas tongs, 11 finished wrenches Morris engine, 12 finished wrenches Worthington engine, 3 sledge hammers, 12 drills, 1 black walnut cabinet, 9 chains, 2 lengths hose, 6 copper lamps, 4 shovels, 1 floor brush, 100 bolts, assorted sizes, 2 bit-stocks, 3 bits, 1 25-foot ladder, 1 20-foot, 1 8-foot, 1 pair steps, 1 hoe, 2 racks, 1 fore-plane, 3 monkey-wrenches, 100 feet 2-inch rope, 4 chisel bars, 1 small die plate, 6 small taps, 4 finished socket wrenches for Worthington engine, 2 14-quart iron pails, 6 spare rubber valves, 1 clock, 4 hand hammers, 2 spare rubber valves for air pump, 1 extra set of grates for boiler, 1 grindstone, 1 anvil.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF JOHN C. WOODWARD, SUPERINTENDENT OF STREETS, JANUARY 1, 1880, BELONGING TO THE APPROPRIATION FOR STREETS.

One engine, blacksmith tools and stock, 235 cords pine wood, 75 tons coal, 10 tons hay, 2 tons straw, 10 tons carrots, 100 bushels oats, 32 bags meal, 36 horses, 14 sets double harnesses, 11 single harnesses, 5 lead harnesses, 26 feed baskets, 38 curry combs and brushes, 40 collars, 40 halters, 50 blankets, 37 surcingles, 1 horse sling, 7 horse covers, 2 buffalo robes, 14 double carts, 7 single carts, 1 watering cart, 5 wood wagons, 2 pauper wagons, 1 lumber wagon, 3 single wagons, 14 double sleds, 2 dump sleds, 2 sleighs, 3 pauper sleighs, 2 stone truck drags, 14 wheelbarrows, 5000 ft. oak plank, 500

ft. pine plank, 44 shovels, 1 stone roller, 1 grindstone, 1 boring machine, 3 sand screens, 2 rakes, 6 street rakes, 6 forks, 5 gravel rakes, 2 augers, 2 anvils, 1 street sweeper, 1 coal screen, 764 ft. edgestone, 38 stone bounds, 1 copper pump, 1 boiler, 4 stoves, 2 coal hods, 2 saws and saw frames, 4 hand saws, 5 wood saws, 2 saw horses, 11 tool chests, 3 dump tubs, 1 cart body, 1 wagon body, 1200 ft. oak lumber, 8000 ft. spruce plank, 4 wood baskets, 1 cask nails, 4 spirit levels, 10 steel wedges, 7 coal baskets, 3 coal shovels, 9 stone-cutters points, 2 trowels, 6 paving mauls, 1 cross-cut saw, 3 ladders, 1 hand cart, 44 snow shovels, 23 hoes, 8 corn brooms, 7 street brooms, 18 lanterns, 4 oil cans, 4 pails, 37 picks, 8 striking hammers, 11 face hammers, 5 paving hammers, 2 hand hammers, 5 stone hammers, 3 brick hammers, 400 lbs. drills, 7 plug drills, 27 crowbars, 3 axes, 1 adze, 1 well jack, 2 jack-screws, 3 ploughs, 1 street scraper, 2 scythes, 110 stake chains, 12 draught chains, 121 hammer handles, 24 pick handles, 100 bundles broom material, 2 stone wheelbarrows, 1 platform scale, 1 pair draught wheels, 2 tubs, 4 snow scrapers, 1 snow plough, 2 nail hammers, 2 long-handled shovels, 3 derrick tubs, 2 chairs, 1 boom derrick and rigging, 39 bridge stringers, 1 writing desk, 2 powder cans, 4 tamping bars, 1 hay cutter, 800 lbs. mineral salt, 75 ft. wide flagging, 239 ft. North River flagging, 269 ft. capping stone. The value of the above named property is \$17,389.41.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF JOHN C. WOODWARD, SUPERINTENDENT OF STREETS, JANUARY 1, 1880, BELONGING TO THE APPROPRIATION FOR SEWERS AND DRAINS.

Fifty shovels, 80 picks, 18 crowbars, 23 striking hammers, 12 face hammers, 5 hand hammers, 1 paving hammer, 20 lanterns, 7 oil cans, 3 forges, 2 electric batteries, 3 shear poles and rigging, 3 powder cans, 4 saws, 7 chains, 12 tag ropes, 7 sheeting mauls, 5 cast iron mauls, 1,540 lbs. steel drills, 4 spirit levels, 3 jack screws, 4 trowels, 6 axes, 4 hoes, 7 hose reducers, 200 ft. rubber hose, 10 pails, 6 wheelbarrows, 3 anvils, 4 pumps, 1 Farmer boiler, 15,000 ft. lumber, 7 tool chests, 3 blacksmith sledges, 1 hand force pump, 1 cast iron pot, 3 pairs rubber boots, 3 galvanized dippers, 3 hydrant valves, 13 plug drills, 6 pairs blacksmith tongs, 5 rakes, 1 tin horn, 3 galvanized pails, 12 sheeting caps, 6 grappling irons, 3 water dippers, 12 Concord grates, 7 catch basin traps, 2 man-hole castings, 6 sheeting grapnels, 1 vise, 9 stone cutters points, 3 steel squares, 6 dump tubs, 3 wrenches. The value of the above named property is \$1,558.45.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF L. G. HOWE, SUPERINTENDENT OF PUBLIC BUILDINGS, JANUARY 1, 1880.

Two thousand five hundred feet Canada boards, 500 ft. cherry boards, 2,000 ft. oak plank, 3,000 ft. old lumber, 125 fence picks, 200 lbs. white lead, 15 gallons spirits turpentine, 25 gallons varnish, 15 gallons oil, 3 old stoves, 18 boxes glass, 95 desk irons, 88 desk stands, 213 pedestals, 16 old tables, 16 water pails, 25 brooms, 15 boxes white crayons, 18 boxes colored crayons, 41 settees belonging to armories and ward-rooms, 49 mats, 2 dusters, 1 mop handle, 17 floor brushes, 17 dust brushes, 7 waste baskets, 7 wash basins, 11 dippers, 2 gas fixtures, 48 ink wells, 7 dust pans, 4 registers, 9 yards tapestry, 10 yards enamelled cloth, 11 ladders, 22 large coffins, 13 small coffins, 3 teachers' desks, 105 chairs, 100 chairs in Ward Six ward-room (evening school), 70 chairs in Ward Three ward-room (evening school), 360 chairs at Green school house (evening school), 15 chairs at school house First street (evening school), 28 settees in ward-rooms (evening school), 4 settees at school house First street (evening school), 240 stools at Green schoolhouse, (evening school), 90 tables at Green school house (evening school), 16 tables in Ward Three ward-room (evening school), 11 tables in Ward Six ward-room (evening school), 4 tables at school house First street (evening school), 30 primary school desks, 124 grammar school desks, 400 ft. rubber hose, 3 dozen pairs butts, 5 papers brads, 17 gross screws, 18 locks, 9 door sets, 2 picks, 12 shovels, 9 wheelbarrows, 1 shingle ripper, 1 grindstone, 1 steel yard, 9 door sets, 2 floor sets, 2 augers, 6 pairs steps, 6 wood saws, 4 hand screws, 3 pump hooks, 9 axes, 5 pairs pipers tongs, 4 mason jacks, 12 paint pots, 15 oil cans, 4 stone jugs, 12 paint brushes, 1 painter's stage and rigging, 2 sand boxes, 1 sand blower, 1 horse, 1 wagon, 1 sleigh, 1 harness, 2 blankets, 1 horse-cover, 1 cast steel bell on Market house, 1 bell on High street church, 1 bell on Varnum school house, 1 clock on High street church, 2 flag-staffs, furniture at City Hall and Huntington and Jackson Halls, furniture in school houses, Ward rooms and armories. The value of the above named property is \$26,657.56.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF REEF. F. BRITTON, SUPERINTENDENT OF STREET LAMPS, JANUARY 1, 1880.

Oil house and shop, 735 gas lights, 137 fluid lights, 2 horses, 3 wagons, 1 wagon cover, 1 lamp rack, 2 sleighs, 4 harnesses, 4

blankets, wagon jack, wrenches, 270 fluid lamps, 16 oil lamps, 11 oil cans, 25 chimneys, 150 gallons naphtha, 13 gallons kerosene oil, 40 gallons alcohol, 1 oil tank, 50 patent torches, 21 ladders, 1 oil pump, 2 pairs tongs, 3 pairs pliers and nippers, 1 oil tester, 1 Johnson pump, 50 ft. rubber hose and pipe, 8 gas burners, 60 lamp post cocks, piping tools, 20 lbs. waste, 220 ft. pipe, 50 lbs. fitting. The value of the above named property is \$19,471.95.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF RUEL F. BRITTON, CHIEF ENGINEER OF THE FIRE DEPARTMENT.
JANUARY 1, 1880.

Four automatic repeaters with battery, 43 signal boxes, 25 miles wire, 11 gongs, 9 indicators, 8 strikers, 1 bell, 3 steam fire engines, 2 hook and ladder trucks, fully equipped, 8 horse hose carriages, 3 hand hose carriages, 7 horse hose sleighs, 1 hand hose sleigh, 8 rollers for hose sleighs, 1 two horse sleigh, 1 two horse sled, 1 pipe truck, 2 light wagons, 1 protective wagon, 3 fuel wagons, 3 pairs lead bars, 15 horses, 7 double harnesses, 4 single harnesses, 1 breast plate, 15 halter bridles, 18 blankets, 8 hoods, 11,350 ft. 2½-inch hose, 300 ft. ¾-inch rubber hose, 27 hose pipes, 10 stop nozzles, 1 four-way chuck, 9 two-way chucks, 22 reducers, 10 carriage jacks, 1 silver trumpet and case, 6 stoves, 21 beds and bedding, 134 badges. There are also 670 hydrants and 17 reservoirs under the charge of the Chief Engineer. The value of the above named property is \$70,000.00.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF LORENZO PHELPS, SUPERINTENDENT OF INSTITUTIONS AT CITY FARM,
JANUARY 1, 1880.

One pair horses, 1 pair matched horses, 1 black horse, 1 roan horse, 6 cows, 14 shoats, 40 fowls, 1 carryall, 1 double sleigh, 1 traverse runner sleigh, 3 farm wagons, 1 market wagon, 2 express wagons, 2 carts, 1 night soil cart, 4 sleds, sideboards for sleds, 13 wheelbarrows, 5 ladders, 125 chestnut posts, casks, etc., 4 single harnesses, 2 pairs double harnesses, 1 cart harness, collars, reins, 4 robes, horse blankets, 1 hay cutter, 1 farmer's boiler, 24 tons first quality English hay, 6 tons second quality English hay, 18 tons meadow hay, 3 tons rowen, 500 lbs. meal, 1000 lbs. fine feed, measures, casks, 1000 lbs. carrots, 1,825 gallons vinegar, 50 bushels turnips, 6 bushels beets, 15 bushels scullions, 125 bushels sugar beets, 40 bushels salt, barrels, scythes, sheaths, 2 mowing machines, 200

cabbages, lime, 70 hot bed sash, old sash, matting, 2 grain cradles, 5 copper pumps, lead pipe, 1 bag filler, night jet, ropes, blocks, 48 coffins, 20 camp beds, 80 boxes, nails, axe handles, 6 ploughs, 2 cultivators, 2 harrows, 1 cultivator harrow, 2 step ladders, 2 jacks, 8 ox chains, 12 stake chains, 1 winnowing mill, 12 shovels, 6 manure forks, 12 hoes, 4 iron rakes, 5 picks, 5 crowbars, 2 sledges, 3 wedges, 16 rakes, 3 bog hoes, 18 hay forks, 1 seed sower, 2 garden lines, 4 wrenches, 6 sickles, 4 ropes, 12 trowels, 4 saw horses, 5 axes, 2 sets whiffletrees, 1 horse hoe, 550 bushels potatoes, squashes, 125 cords wood, 80 tons coal, 1 hand engine, hose, stock and tools in carpenter's, painter's, blacksmith's and shoe maker's shops, provisions in store rooms, beds, bedding, furniture, crockery, etc. The value of the above named property is \$14,057.69.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF JAMES MURPHY, SEALER OF WEIGHTS AND MEASURES, JANUARY 1, 1880.

Forty 50 lb. weights, 1 each 7, 14 and 28 lb. weights, 1 set avoirdupois weights, 1 set troy weights, 1 set apothecary weights, 1 set dry measures, 1 set liquid measures, 1 English beam balance scale, 1 testing scale, 1 metric weight, 1 metric measure, 1 set figures and stamps, 1 branding iron, 2 boxes, 1 half bushel flax seed. The value of the above named property is \$123.00.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF ALBERT PINDER, CITY MARSHAL AT POLICE COURT ROOMS, JANUARY 1, 1880.

Twenty-eight white oak chairs, 17 pine chairs, 6 cane seat chairs, 1 easy chair, 2 office chairs, 1 safe, 34 settees, 6 black walnut tables, 1 mahogany table, 5 officer's desks, 1 witness stand, 2 clocks, 60 yards ratteen carpet, 30 yards wool carpet, 50 yards tapestry carpet, oil cloth, 1 crumb cloth, 10 spittoons, 2 thermometers, 1 broom, 1 floor brush, 1 dust pan, 1 dust brush, 1 feather duster, 12 mats, 2 carpet sweepers, 1 pail. The value of the above named property is \$701.40.

SCHEDULE OF PERSONAL PROPERTY UNDER THE CHARGE OF ALBERT PINDER, CITY MARSHAL, AT POLICE STATION, JANUARY 1, 1880.

One safe, 12 desks, 45 office chairs, 6 spittoons, 10 ink stands, 2 clocks, 2 tables, 1 wardrobe, 1 lounge, 1 settee, 6 dippers, 20 locks

and keys, 1 slate, 100 police clubs, 40 police belts, 80 police badges, 1 tub, 5 mattresses, 1 ice tank, 5 lanterns, 2 brushes, 2 brooms, 2 shovels, 2 pitchers, 2 mirrors, 1 mat, police dockets and records, law books, stationery, 1 Lippincott's Gazetteer, 1 shovel, 1 hoe, 1 wheelbarrow, 2 fire hooks, 2 fire chisels, 9 ash hods, 2 whitewash brushes, 1 pail, 1 hammer, 1 wrench. The value of the above named property is \$759.15.

REAL AND PERSONAL PROPERTY OWNED BY THE CITY.

| | |
|---|----------------|
| Real Estate..... | \$ 859,697 00 |
| Water Works. net cost to January 1, 1880..... | 2,156,032 61 |
| Personal Property in care of Superintendent of Streets | 18,947 86 |
| Personal Property in care of Superintendent of Institutions at City Farm..... | 14,057 69 |
| Personal Property in care of Superintendent of Public Buildings..... | 3,057 56 |
| Personal Property in care of Superintendent of Street Lamps..... | 19,471 95 |
| Personal Property in care of Chief Engineer of the Fire Department..... | 49,000 00 |
| Fire Alarm Telegraph in care of Chief Engineer of the Fire Department..... | 21,000 00 |
| Personal Property in care of Sealer of Weights and Measures..... | 123 00 |
| Personal Property in care of City Marshal..... | 1,460 55 |
| Furniture in City Hall and in Huntington and Jackson Halls..... | 9,000 00 |
| Furniture in School Houses..... | 10,200 00 |
| Furniture in Armories..... | 550 00 |
| Furniture in Ward Rooms..... | 150 00 |
| Books, etc., at City Library..... | 13,500 00 |
| Bell on Varnum School House..... | 1,000 00 |
| Bell on Market House Building..... | 900 00 |
| Bell on High Street Church..... | 500 00 |
| Clock on High Street Church..... | 500 00 |
| Flagstaffs..... | 900 00 |
| Debts due the City..... | 80,645 48 |
| Cash in Treasury..... | 44,710 44 |
| | <hr/> |
| | \$3,305,404 14 |
| | <hr/> |

SEWERS CONSTRUCTED IN 1879.

| | |
|---|-------------|
| In Andrews street, from Lawrence street 200 feet southerly | 650 12 |
| Branch and Walker streets, from a point in Branch street, opposite the estate of Luther J. Eames to Grove street..... | 1,493 89 |
| Beech street, from Third street to a point near Sixth street..... | 792 68 |
| Beech street, from Sixth street to a point near land of J. M. G. Parker..... | 958 57 |
| Coburn street, from River street to Jewett street.... | 1,150 51 |
| Cross street, from Common street to Suffolk street.. | 2,566 80 |
| Centre street, from Central street to a point near Chapel street..... | 348 43 |
| Dover street, from Branch street to a point near Grove street..... | 927 37 |
| Fairmount street, from a point near Fairview street to a point opposite the premises of A. C. Taylor | 1,273 94 |
| Grove street, from Walker street to a point near Dover street..... | 427 76 |
| Hildreth street, from Hampshire street to a point near Bridge street..... | 1,094 88 |
| Hanover street, from Merrimack street 100 feet westerly..... | 108 84 |
| High street, from East Merrimack street to a point near Chestnut street | 1,000 09 |
| Jewett street, from West Sixth street to a point 750 feet northerly..... | 1,660 54 |
| Kinsman street, from a point near Floyd street to a point near Whipple street..... | 145 24 |
| Keene street, from Chapel street to Cedar street.... | 857 62 |
| Lawrence and Agawam streets, from Hale's Brook to Barrington street..... | 4,441 48 |
| Lawson street, from Queen street to a point near School street..... | 192 64 |
| <hr/> | |
| <i>Amount carried forward.....</i> | \$20,091 40 |

| | |
|--|-------------|
| <i>Amount brought forward</i> | \$20,091 40 |
| In Leroy street, from Loring street to a point near Coral street..... | 301 00 |
| Lawrence street, from Hale's Brook to Swift street | 1,303 22 |
| *Marginal sewer, from a point opposite land of Smith Adams to a point in land of Stephen P. Sargent, (commenced in 1878) | 15,588 59 |
| Mill street, from Lawrence street to a point opposite the premises of Samuel N. Wood..... | 307 58 |
| Moody street, from a point near James street to a point opposite the premises of the Lowell Manufacturing Co..... | 1,226 19 |
| Middlesex street, from Elliott street to a point about 160 feet westerly from Garnet street..... | 4,089 54 |
| Middlesex and Thorndike streets, from a point opposite Brewery court to King street..... | 2,045 42 |
| Nichols street, from a point opposite the premises of Geo. H. Taylor to Westford street..... | 154 51 |
| Prospect street, from Kidder street to a point opposite the premises of Jacob Shepard..... | 402 78 |
| Pawtucket street, from Mt. Washington street to Arlington street..... | 1,620 87 |
| Porter street, from Westford street to a point near Princeton street..... | 1,158 94 |
| Queen street, from a point near Somerset street to a point near Westford street..... | 278 94 |
| River street, from the terminus of the sewer built in 1875, 200 feet westerly..... | 286 92 |
| Railroad street, from a point opposite the premises of John Dennis to a point near Hale street..... | 957 18 |
| Swift street, from Lawrence street to a point near Whipple street..... | 489 88 |
| Sixth street, from Myrtle street to a point near Beacon street..... | 1,689 53 |
| Somerset street, from Queen street to a point near School street..... | 153 74 |
| Thorndike and Congress streets, from a point opposite the premises of the Thorndike Mfg. Co. to Hale's Brook..... | 540 27 |
| Talbot street, from Fairmount street to a point opposite the premises of Aaron Blanchard..... | 555 00 |
| Wyman street, from Nesmith street to a point opposite the premises of F. T. Greenhalge..... | 298 99 |
| Westford street, from Coral street to a point opposite the premises of Francis Carll..... | 343 66 |
| <i>Amount carried forward</i> | \$53,884 15 |

*The expenditure in 1878 was \$26,517.47, making the total cost of the sewer to this point \$42,106.06.

| | |
|---|---------------------|
| <i>Amount brought forward</i> | \$53,884 15 |
| In Westford street, from a point opposite the premises of Francis Carll to a point near School street.... | 175 00 |
| Walker street, from Grove street to a point near Westford street..... | 1,118 01 |
| Westford street, from a point 150 feet east of Porter street, to a point opposite the premises of David Lane..... | 1,769 85 |
| Total cost of sewers constructed in 1879..... | \$ 56,947 01 |
| Cost of sewers constructed previous to 1879..... | 506,705 07 |
| Total cost of sewers to January 1, 1880..... | <u>\$563,652 08</u> |

LEASE AND RENTS OF BUILDINGS OWNED BY THE CITY.

| | Per Annum |
|---|------------|
| Leased to Charles P. Talbot & Co., store and cellar in Market house building, for five years, from October 1, 1878..... | \$1,200 00 |
| Rented to Commonwealth, rooms for armories..... | 800 00 |
| Rented to County of Middlesex, Police Court Rooms.. | 750 00 |
| Rented to Carleton & Hovey, store in City Hall Building | 1,200 00 |
| Rented to William Bascom, store in City Hall Building | 900 00 |
| Rented to Percia L. Dyar, store in City Hall Building.. | 950 00 |
| Rented to Helen J. Bartlett, store in City Hall Building | 900 00 |
| Rented to Frank S. Berry, tenements Nos. 25 & 27. Kirk street..... | 600 00 |
| Rented to Simon B. Harris, house on Wilder street.... | 180 00 |
| | <hr/> |
| | \$7,480 00 |
| | <hr/> |

LAND AND BUILDINGS FOR WHICH
THE CITY PAYS RENT.

| | Per Annum |
|--|------------|
| The city pays to the Boston & Lowell Railroad Company, for ground rent for Huntington and Jackson Halls..... | \$ 475 00 |
| The city pays on lease to Hocum Hosford for rent of rooms for City Library, for ten years from January 1, 1872..... | 1,200 00 . |
| The city pays on lease to Francis H. Chandler, for rent of building for horse carriage in Pawtucketville, for five years from January 1, 1879..... | 130 00 |
| | <hr/> |
| | \$1,805 00 |
| | <hr/> |

DAVID CHASE.

Auditor.

TREASURER'S ACCOUNT, 1879.

CITY OF LOWELL.

Office of CITY TREASURER AND COLLECTOR OF TAXES,

January 1, 1880.

TO THE CITY COUNCIL:

Gentlemen—I have the honor to present herewith an account of the receipts and payments from January 1, to December 31, 1879.

Respectfully submitted,

JOHN H. MCALVIN.

City Treasurer and Collector of Taxes.

IN COMMON COUNCIL, January 13, 1880.

Read and referred to the Joint Committee on Accounts. Sent up for concurrence.

DAVID CHASE,

Clerk.

IN BOARD OF ALDERMEN, January 13, 1880.

Read and referred in concurrence.

SAMUEL A. MCPHETRES,

City Clerk.

TREASURER'S ACCOUNT.

195

Dr.

CITY OF LOWELL in account with JOHN H. MCALVIN:

For cash paid on account of

| | |
|--|--------------|
| Schools | \$123,991 61 |
| School houses | 18,052 03 |
| Streets | 104,562 99 |
| Reserved Fund | 20,126 28 |
| Paupers | 47,289 61 |
| Police | 49,582 07 |
| Fire Department | 65,723 81 |
| Sewers | 66,552 79 |
| Commons | 2,397 76 |
| Printing | 2,458 76 |
| Lighting | 16,735 97 |
| Repairs of Public Buildings | 7,534 01 |
| Library | 4,476 03 |
| Water Works | 149,415 04 |
| Health | 2,777 21 |
| Salaries | 16,833 75 |
| Interest | 33,019 87 |
| State Aid | 10,444 64 |
| State Aid, Indigent Soldiers and Sailors | 5,812 56 |
| City Debt | 22,500 00 |
| National Bank Tax | 15,952 30 |
| Temporary Loans | 250,000 00 |
| State Tax | 10,550 00 |
| County Tax | 15,241 83 |
| City of Lowell Water Loan Sinking Fund | 25,000 00 |
| Sinking Fund for Loan of 1876 | 4,000 00 |

\$1,091,030 92

Cash on hand December 31, 1879 44,710 44

\$1,135,741 36

City Treasurer and Collector of Taxes, January 1 to December 31, 1879. *Cr.*

By cash received on account of

| | |
|--|----------------|
| Cash on hand January 1, 1879 | \$ 74,574 91 |
| Schools | 380 86 |
| School-houses | 1,362 00 |
| Streets | 22,116 57 |
| Reserved Fund | 39,301 97 |
| Paupers | 11,210 86 |
| Police | 4,380 86 |
| Fire Department | 1,061 25 |
| Sewers | 9,181 14 |
| Commons | 253 50 |
| Lighting | 14 06 |
| Repairs of Public Buildings | 2,093 44 |
| Library | 3,187 64 |
| Water Works | 110,185 34 |
| Taxes of 1877 | 5 43 |
| Taxes of 1878 | 21,350 53 |
| Taxes of 1879 | 537,795 46 |
| Interest | 2,685 06 |
| State Aid | 12,509 81 |
| State Aid, Indigent Soldiers and Sailors | 5,037 81 |
| National Bank Tax | 3,410 97 |
| Temporary Loans | 250,000 00 |
| Corporation Tax | 23,641 89 |
| | <hr/> |
| | \$1,135,741 36 |
| | <hr/> |

CITY OF LOWELL.

IN COMMITTEE ON ACCOUNTS.

January 21, 1880.

TO THE CITY COUNCIL :

Gentlemen—The Joint Committee on Accounts, to whom was referred the account of John H. McAlvin, City Treasurer and Collector of Taxes, for the year 1879, hereby certify that pursuant to the ordinances of the City of Lowell, we have examined said account, and find the same correctly cast, and all payments therein charged, sustained by proper vouchers.

We have also examined the accounts of said Treasurer and Collector, up to the day of the date of this report, at which time we find a cash balance of \$30,536.32 in the hands of John H. McAlvin, City Treasurer and Collector of Taxes, which we have verified by an actual examination of all funds in the hands of the City Treasurer and Collector of Taxes.

Respectfully submitted,

CHAS. H. RICHARDSON.

A. F. WRIGHT,

FRED WOODIES,

W. L. BATES,

HENRY C. COOPER.

Joint Committee on Accounts. 1880.

IN COMMON COUNCIL. January 27, 1880.

Read and accepted. Sent up for concurrence.

DAVID CHASE,

Clerk.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and accepted in concurrence.

SAMUEL A. McPIETRES,

City Clerk.

WATER LOAN SINKING FUND ACCOUNT.

CITY OF LOWELL.

Office of CITY TREASURER AND COLLECTOR OF TAXES.

January 1. 1880.

TO THE CITY COUNCIL :

Gentlemen — I have the honor to present herewith a statement of the condition of the City of Lowell Water Loan Sinking Fund Account for the year 1879, to wit :

RECEIPTS.

| | |
|--|--------------|
| The whole amount of money standing to the credit of the City of Lowell Water Loan Sinking Fund Account, on the thirty-first day of December, 1879, was | \$213,988 55 |
| | \$213,988 55 |

| | |
|---|--------------|
| Of this amount there was received previous to January 1, 1879 | \$176,041 82 |
| Appropriated by the City Council in 1879 | 25,000 00 |
| Received in 1879, for interest on investments | 12,946 73 |
| | \$213,988 55 |

PAYMENTS.

| | |
|--|--------------|
| The amount paid out and invested for securities previous to January 1, 1879, was | \$174,972 38 |
|--|--------------|

The amount paid out and invested from Jan. 1, to Dec. 31, 1879, was \$38,118.61 for the following securities, to wit :

| | |
|---|--------------|
| Two \$1,000.00 Bangor. 7s | \$ 2,000 00 |
| Premium, | 280 00 |
| Accrued interest. | 49 39 |
| | \$2,329 39 |
| <i>Amounts carried forward</i> | \$174,972 38 |

| | | | | | | | | |
|--------------------------------|---|---|---|----|---|---|------------|--------------|
| <i>Amounts brought forward</i> | . | . | . | . | . | . | \$2,329 39 | \$174,972 38 |
| One \$200.00 Dover. | . | . | . | 6s | . | . | 200 00 | |
| Premium, | . | . | . | . | . | . | 16 00 | |
| Accrued interest, | . | . | . | . | . | . | 1 13 | |
| One \$1,000.00 Somerville, | . | . | . | 5s | . | . | 1,000 00 | |
| Premium, | . | . | . | . | . | . | 55 00 | |
| Accrued interest, | . | . | . | . | . | . | 17 22 | |
| One 1,000.00 Nashua. | . | . | . | 6s | . | . | 1,000 00 | |
| Premium, | . | . | . | . | . | . | 95 00 | |
| Accrued interest, | . | . | . | . | . | . | 15 58 | |
| One \$1,000.00 Arlington | . | . | . | 6s | . | . | 1,000 00 | |
| Premium, | . | . | . | . | . | . | 125 00 | |
| Accrued interest, | . | . | . | . | . | . | 23 50 | |
| One \$1,000.00 Arlington, | . | . | . | 5s | . | . | 1,000 00 | |
| Premium, | . | . | . | . | . | . | 75 00 | |
| Accrued interest, | . | . | . | . | . | . | 9 30 | |
| One \$5,000.00 Lawrence, | . | . | . | 6s | . | . | 5,000 00 | |
| Premium, | . | . | . | . | . | . | 750 00 | |
| Accrued interest, | . | . | . | . | . | . | 14 16 | |
| Fifteen \$1,000.00 Manchester, | . | . | . | 6s | . | . | 15,000 00 | |
| Premium, | . | . | . | . | . | . | 1,640 00 | |
| Accrued interest, | . | . | . | . | . | . | 293 99 | |
| Fifteen \$500.00 Manchester, | . | . | . | 6s | . | . | 7,500 00 | |
| Premium, | . | . | . | . | . | . | 820 00 | |
| Accrued interest, | . | . | . | . | . | . | 138 34 | |
| | | | | | | | | 38,118 61 |
| | | | | | | | | 213,090 99 |
| Cash on hand December 31, 1879 | . | . | . | . | . | . | | 897 56 |
| | | | | | | | | \$213,988 55 |

RECAPITULATION.

September 22, 1873 to December 31, 1879.

DR.

For cash paid for sundry securities which includes premium and accrued interest, to wit:

| | | | | | | | |
|-------------------------------|----------------------|-----------|---|---|---|---|--------------|
| 36. | 1,000.00 Lowell, | Bonds, 6s | . | . | . | . | 36,117 25 |
| 30. | 1,000.00 Lawrence, | Bonds, 6s | . | . | . | . | 29,427 34 |
| 2. | 1,000.00 Chelsea, | Bonds, 6s | . | . | . | . | 2,010 67 |
| 38. | 1,000.00 Bangor, | Bonds, 6s | . | . | . | . | 39,648 25 |
| 11. | 1,000.00 Portland, | Bonds, 6s | . | . | . | . | 11,684 08 |
| 1. | 5,000.00 Haverhill, | Bond, 6s | . | . | . | . | 5,626 25 |
| 2. | 1,000.00 Fall River, | Bonds, 6s | . | . | . | . | 2,165 34 |
| 4. | 500.00 Bangor, | Bonds, 6s | . | . | . | . | 2,180 00 |
| <i>Amount carried forward</i> | . | . | . | . | . | . | \$128,859 18 |

| | | | | | | |
|--------------------------------|-----------|-------------|--------|----|---|---------------------|
| <i>Amount brought forward</i> | | | | | | \$128,859 18 |
| 1, | 1,000.00 | Arlington, | Bond, | 5s | . | 1,084 30 |
| 16, | 500.00 | Manchester, | Bonds, | 6s | . | 9,011 67 |
| 1, | 10,000.00 | Lowell, | Note, | 5½ | . | 10,229 03 |
| 1, | 10,000.00 | Beverly, | Note, | 6s | . | 10,381 67 |
| 1, | 1,000.00 | Combridge, | Bond, | 6s | . | 1,079 00 |
| 1, | 1,000.00 | Natick, | Bond, | 5s | . | 1,024 17 |
| 21, | 1,000.00 | Wayland | Bonds, | 5s | . | 21,752 50 |
| 2, | 1,000.00 | Bangor, | Bonds, | 7s | . | 2,329 39 |
| 1, | 200.00 | Dover, | Bond, | 6s | . | 217 13 |
| 1, | 1,000.00 | Somerville, | Bond, | 5s | . | 1,072 22 |
| 1, | 1,000.00 | Nashua, | Bond, | 6s | . | 1,110 58 |
| 15, | 1,000.00 | Manchester, | Bonds, | 6s | . | 16,933 99 |
| 2, | 1,000.00 | Arlington, | Bonds, | 6s | . | 2,242 00 |
| 1, | 5,000.00 | Lawrence, | Bond, | 6s | . | 5,764 16 |
| | | | | | | 213,090 99 |
| Cash on hand December 31, 1879 | | | | | | 897 56 |
| | | | | | | <u>\$213,988 55</u> |

CR.

CITY OF LOWELL WATER LOAN SINKING FUND.

By cash received from Sept. 22, 1873, to Dec, 31, 1879. . . \$213,988 55

Respectfully submitted,

JOHN H. McALVIN,

City Treasurer and Collector of Taxes.

IN COMMON COUNCIL, January 13, 1880.

Read and referred to the Joint Committee on Accounts. Sent up for concurrence.

DAVID CHASE.

Clerk.

IN BOARD OF ALDERMEN, January 13, 1880.

Read and referred in concurrence.

SAMUEL A. McPIETRES.

City Clerk.

CITY OF LOWELL.

IN COMMITTEE ON ACCOUNTS.

January 21, 1880.

TO THE CITY COUNCIL :

Gentlemen—The Joint Committee on accounts, to whom was referred the Report of John H. McAlvin, City Treasurer and Collector of Taxes, of the condition of the City of Lowell Water Loan Sinking Fund Account to January 1, 1880, hereby certify that we have examined said account, and find the securities to be the same as reported, and all in the hands of John H. McAlvin, City Treasurer and Collector of Taxes. The whole amount of said Sinking Fund Account Dec. 31, 1879, was \$213,988.55.

Respectfully submitted,

CHAS. H. RICHARDSON,

A. F. WRIGHT,

FRED WOODIES,

W. L. BATES,

HENRY C. COOPER.

Joint Committee on Accounts, 1880.

IN COMMON COUNCIL, January 27, 1880.

Read and accepted. Sent up for concurrence.

DAVID CHASE,

Clerk.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and accepted in concurrence,

SAMUEL A. McPHETRES,

City Clerk.

SINKING FUND ACCOUNT,

FOR THE REDUCTION OF THE LOAN OF 1876.

CITY OF LOWELL.

Office of CITY TREASURER AND COLLECTOR OF TAXES.

January 1, 1880.

TO THE CITY COUNCIL:

Gentlemen—I have the honor to present herewith a statement of the condition of the Sinking Fund for the reduction of the loan of 1876. for the year 1879, to wit:

RECEIPTS.

| | |
|---|-------------|
| The whole amount of money standing to the credit of the Sinking Fund for the reduction of the loan of 1876. on December 31, 1879, was . . . | \$12,737 37 |
|---|-------------|

| | |
|---|-------------|
| Of this amount there was received previous to January 1, 1879, the sum of | \$8,255 00 |
| Appropriated by the City Council in 1879, the sum of | 4,000 00 |
| Cash received in 1879. for interest on investments | 482 37 |
| | <hr/> |
| | \$12,737 37 |

PAYMENTS.

| | |
|---|-------------|
| The amount paid out and invested for securities previous to 1879, was | \$8,045 09 |
| The amount paid out and invested for securities in 1879, was \$4,291 11, to wit: | |
| Four \$1,000.00 Lewiston Bonds, 5s | 4,000 00 |
| Premium | 200 00 |
| Accrued interest | 91 11 |
| Cash on hand December 31. 1879 | 401 17 |
| | <hr/> |
| | \$12,737 37 |

RECAPITULATION.

October 10, 1877, to December 31, 1879.

DR.

SINKING FUND FOR THE REDUCTION OF THE LOAN OF 1876.

For cash paid out for sundry securities which includes premium and accrued interest, to wit:

| | | | | | |
|-------|------------|----------------------|---|---|------------|
| Three | \$1,000.00 | Manchester Bonds, 6s | . | . | \$3,341 50 |
| One | 500.00 | Manchester Bond, 6s | . | . | 560 25 |
| Four | 1,000.00 | Wayland Bonds, 5s | . | . | 4,143 34 |
| Four | 1,000.00 | Lewiston Bonds, 5s | . | . | 4,291 11 |

\$12,336 20

Cash on hand December 31, 1879 401 17

\$12,737 37

CR.

SINKING FUND FOR THE REDUCTION OF THE LOAN OF 1876.

By cash received to December 31, 1879 12,737 37

Respectfully submitted.

JOHN H. McALVIN,

City Treasurer and Collector of Taxes.

IN COMMON COUNCIL, January 13, 1880.

Read and referred to the Joint Committee on Accounts. Sent up for concurrence.

DAVID CHASE,

Clerk

IN BOARD OF ALDERMEN, January 13, 1880.

Read and referred in concurrence.

SAMUEL A. McPHETRES,

City Clerk.

CITY OF LOWELL.

IN COMMITTEE ON ACCOUNTS.

January 21, 1880.

TO THE CITY COUNCIL:

GENTLEMEN—The Joint Committee on Accounts, to whom was referred the report of the condition of the Sinking Fund for the Reduction of the Loan of 1876, to January 1, 1880, hereby certify that we have examined said account, and find the securities to be the same as reported, and all in the hands of John H. McAlvin, City Treasurer and Collector of Taxes.

The whole amount of said Sinking Fund Account, December 31, 1879, was \$12,737.37.

Respectfully submitted.

CHAS. H. RICHARDSON.

A. F. WRIGHT.

FRED WOODIES.

W. L. BATES.

HENRY C. COOPER,

Joint Committee on Accounts, 1880.

IN COMMON COUNCIL, January 27, 1880.

Read and accepted. Sent up for concurrence.

DAVID CHASE,

Clerk.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and accepted in concurrence.

SAMUEL A. McPHETRES,

City Clerk.

HAPGOOD WRIGHT CENTENNIAL TRUST FUND.

CITY OF LOWELL.
Office of CITY TREASURER AND COLLECTOR OF TAXES,
January 1, 1880.

TO THE CITY COUNCIL:

GENTLEMEN—I have the honor to report that the amount standing to the credit of the Hapgood Wright Centennial Trust Fund, on December 31, 1879, was \$1,188.79.

Said fund is invested as follows:

| | | |
|----------------------------------|-----------|------------|
| One \$1,000.00 Lawrence Bond, 6s | | \$1,000 00 |
| Premium. | | 116 75 |
| Accrued interest. | | 23 33 |
| Cash on hand December 31, 1879. | | 48 71 |
| | | <hr/> |
| | | \$1,188 79 |

Respectfully submitted.

JOHN H. McALVIN,
City Treasurer and Collector of Taxes.

IN COMMON COUNCIL. January 13, 1880.

Read and referred to the Joint Committee on Accounts. Sent up for concurrence.

DAVID CHASE,
Clerk.

IN BOARD OF ALDERMEN. January 13, 1880.

Read and referred in concurrence.

SAMUEL A. McPHETRES,
City Clerk.

CITY OF LOWELL.

IN COMMITTEE ON ACCOUNTS,
January 21, 1880.

TO THE CITY COUNCIL :

GENTLEMEN—The Joint Committee on Accounts, to whom was referred the Report of John H. McAlvin, City Treasurer and Collector of Taxes, of the condition of the Hapgood Wright Centennial Trust Fund to January 1, 1880, hereby certify that they have examined said Fund Account and find the same to be as reported, and all in the hands of John H. McAlvin, City Treasurer and Collector of Taxes.

The whole amount of said Fund to January 1, 1880, is \$1,188.79.

Respectfully submitted,

CHAS. H. RICHARDSON.

A. F. WRIGHT,

FRED WOODIES,

W. L. BATES,

HENRY C. COOPER,

Joint Committee on Accounts, 1880.

IN COMMON COUNCIL, January 27, 1880.

Read and accepted. Sent up for concurrence.

DAVID CHASE,
Clerk.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and accepted in concurrence.

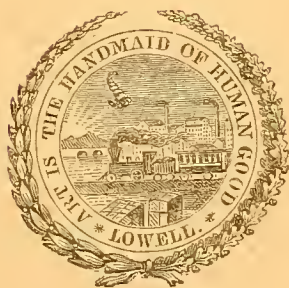
SAMUEL A. MCPHETRES,
City Clerk.

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ANNUAL REPORT
OF THE
DIRECTORS OF THE CITY LIBRARY
OF THE
CITY OF LOWELL,

FOR THE YEAR 1879.



LOWELL, MASS.:
MARDEN & ROWELL, BOOK AND JOB PRINTERS.
1880.

CITY OF LOWELL.

IN COMMON COUNCIL, December 23, 1879.

Read and sent up to the Board of Aldermen.

DAVID CHASE, *Clerk.*

IN BOARD OF ALDERMEN, December 23, 1879.

Received and Read.

SAMUEL A. MCPHETRES, *City Clerk.*

REPORT.

DIRECTORS' ROOM, CITY LIBRARY, }
LOWELL, Dec. 22, 1879.

To the City Council of Lowell:

The Board of Directors of the City Library have the honor to submit the following Report for the year 1879 : —

RECEIPTS.

| | |
|--|------------|
| Balance undrawn January 1, 1879 | \$ 95 36 |
| Appropriation | 1,500 00 |
| Dog Tax transferred to Library account | 2,118 56 |
| Subscriptions | 947 50 |
| Catalogues and Supplements | 69 50 |
| Fines | 36 20 |
| Lost Books — Value paid by Subscribers | 11 28 |
| Old Paper and Desk | 4 50 |
| Total Receipts | \$4,783 00 |

EXPENDITURES.

| | |
|--------------------------------------|-----------------------|
| Salary of Librarian | \$1,025 00 |
| Rent of rooms | 1,200 00 |
| Heating | 200 00 |
| Gas | 135 80 |
| Books for circulation | 1,084 95 |
| Blank Books and Stationery | 20 55 |
| Binding | 392 40 |
| Printing and Advertising | 51 75 |
| Postage and Expressage | 9 22 |
| Amount carried forward, | \$4,119 67 \$4,783 00 |

| | | |
|--|------------|-------------------|
| <i>Amount brought forward,</i> | \$4,119 67 | \$4,783 00 |
| Cleaning | 5 85 | |
| Repairs | 20 55 | |
| Manila Paper | 48 40 | |
| Matches | 50 | |
| Water Cooler, Ice Tongs, and Ice | 13 25 | |
| Expenses of the Librarian to the Conference of Librarians, | 6 00 | |
| 3,000 Catalogue Supplements | 288 19 | |
| Bowl for the Washroom | 4 85 | |
| Balance undrawn | 275 74 | |
| | | <u>\$4,783 00</u> |

CONDITION OF THE LIBRARY.

| | |
|---|--------|
| Volumes added to replace in 1879 | 94 |
| New volumes added by purchase in 1879 | 847 |
| Volumes donated in 1879 | 23 |
| Total volumes added in 1879 | 870 |
| Volumes in Library | 21,226 |
| Books lost and not paid for in 1879 | 9 |
| Estimated value of the same | \$5.00 |
| New subscribers in 1879 | 509 |
| Non-resident subscribers | 27 |
| Whole number of subscribers in 1879 | 1868 |
| Books delivered for home use | 87,124 |
| Daily average | 290 |

The Directors are happy to report that the Library is still gaining favor with our citizens. The number of subscribers is steadily increasing from one year to another. The number of books read the past year is greater than in any preceding year; but this is not to be regarded as a too certain indication of the profit received. The usefulness of a library depends not so much upon the number of books used as upon the value of the matter read. In regard to the character of the books read, never has so great an improvement been noted as in the year just closed. The Board of Directors for the year 1878, shortly before their term expired, prepared an Eclectic Catalogue

containing the titles of a large number of books to be found in the City Library, and comprising the best books upon each of the various subjects of knowledge. This catalogue was published early in the year 1879, and has been given by the Librarian to the patrons of the Library. Many were called for after the edition was wholly exhausted. The purpose sought was accomplished. The books indicated upon this catalogue have been repeatedly taken from the Library, and many of the patrons read wholly from the books whose titles are given in that little pamphlet. The fact is that many would be glad to read the best books, if they knew exactly what they wanted. The Library Catalogue is very confusing, because of its size, and it is not safe to trust to the popular verdict respecting the value of a book. At the same time, until the Eclectic Catalogue was issued, the great mass of the reading public, from its inability to determine from the catalogue what to read, relied almost exclusively upon the recommendation of friends and acquaintances, or what we may call the popular verdict, in the selection of books. It is obvious, that in this way, the best books would not be read. As the great majority of persons do not consult the book reviews and do not know many of the good books that are published, it is obvious, that without the guide of an Eclectic Catalogue, or some good monitor, the best books are not likely to find their way into circulation. The extensive use made of the eclectic list the past year, and the large number of excellent books which it caused to be taken from the Library, have fully justified the Board in preparing the same, and have signally demonstrated the value and good results of the first experiment of the kind. It is to be hoped that the incoming Board will prepare a similar list, including the valuable books added during the past two years.

Of the valuable books placed upon the shelves during the present year, we may notice in the department of philosophy

and psychology: "Evolution, Old and New," by Samuel Butler; "Relations of Mind and Brain," by Calderwood; "Freedom in Science and Teaching," by Hæckle; "Problems of Life and Mind," third series, by Lewes; "The Evolution of Man," by Hæckle; "History of Creation," by Hæckle; "The Mystery of Life, and Other Papers," by Parsons; "Is Life Worth Living?" by Mallock, and an answer to the same entitled "The Value of Life."

On theology have been added: "The Latest Word of Universalism;" "Voices from Babylon," by Seiss; "Mixed Essays," by Matthew Arnold; "The Endless Future of the Human Race," by Henry; "St. Paul and Protestantism," by Matthew Arnold; "Practical Theology," by Van-Oosterzee; "Society the Redeemed Form of Man," by Henry James; "Essays of To-day: Religious and Theological," by W. W. Newton; "Motives of Life," by David Swing; "Life of Jesus," by Renan; "Lectures on the Origin and Growth of Religion," by Max Muller; "Life and Works of St. Paul," by Farrar; "Lectures to Young Men," by Beecher; "Boston Monday Lectures," by Joseph Cook.

In the department of history have been added: "History of England, Illustrated," by Guizot; "Bismarek in the Franco-German War," by Buseh; "History of Germany," by Madame DeStael; "History of Franklin, Mass.," by Blake; "Our First Century," by R. M. Devens; "History of Roxbury," by Drake; "Landing of John Endicott at Salem," by the Essex Institute; "Historical-Genealogical Register," for the current year; "History of Douglas, Mass.," by Emerson; "Waltham, Past and Present," by Nelson; "History of Waterford, Maine," by Warren; "Cassell's Illustrated History of the Russo-Turkish War;" "Historical Sketch of Salem, 1628-1879," by Osgood and Batchelder; "History of Russia from the Earliest Times," by Rambaud; "History of Princeton, N. J., and Its Institutions," by Hageman; "Pictorial

History of Texas," by Thrall; "The Russian Army, and Campaigns in Turkey, 1877-8," by Green; "The Genealogies and Estates of Charlestown," by Wyman; "History of France from the First Revolution," by Henri Martin; "History of New York During the Revolution," by Jones, a very valuable reprint. It will be seen that the foregoing list includes works upon the Eastern question, and the important posthumous publications of Guizot and Henri Martin.

In the department of biography the following valuable works have been added during the past year: "Memoirs of Geo. David Cummings;" "John Lothrop Motley," by O. W. Holmes; "Memoirs of B. F. Butler," by Bland; "Memoirs of Baroness Bunsen," by Hare; "Memoirs of Honore de Balzac," by Madame de Surville; "Memoirs of Louis Adolphe Thiers," by Le Goff; "Memoirs of Goethe and Schiller," by Boyesen; "Memoirs of the Prince Consort," by Theodore Martin; "Memoirs of Alexander Hamilton," by George Shea; "Records of a Girlhood," by Frances Ann Kemble; and "Life and Times of Stein," by Seeley. Most of these works are very valuable, and should be read by all lovers of biography; many indeed have already been read.

Of works on travel there have been added: "Sport and Work on the Nepaul Frontier," by "Maori"; "A Holiday Tour in Europe," by Cook; "Bedouin Tribes of the Euphrates," by Lady Anne Blunt; "Through Asiatic Turkey," by Geary; "Midnight Marches Through Persia," by Ballantine; "Wanderings in Patagonia," by Beerbohn; "From Egypt to Palestine Through Sinai," by Bartlett; "The Round Trip by Way of Panama," by Codman; "The Great Fur Land," by Robinson; "A Summer Jaunt Through the Old World," by Holden; "What Mr. Darwin Saw in a Voyage Round the World, in the Ship Beagle;" "Tyrol and the Skirt of the Alps," by Geo. E. Waring, Jr.; "Tour in Morocco and the Great Atlas," by Hooker and Ball; "Adventures of Two

Youths in Japan." The last work is particularly valuable, giving valuable information concerning Japanese art and curiosities.

In the department of the social sciences the following are among the most valuable additions: "American Colleges, Their Students and Work," by Thwing; Gladstone's "Gleanings of Past Years;" "Destruction and Reconstruction," by Taylor; "Speeches from the Dock," by McElroy; "The Government of M. Thiers," by Jules Simon; "Speeches and Public Letters of Daniel O'Connell;" "Constitutional and Political History of the United States," Vol. II., by Von-Holst; and the "Speeches and Orations of Daniel Webster," edited by Edwin P. Whipple.

Of the poems added we will note: "The Complete Poetical Writings of J. G. Holland;" "The Æneid of Virgil," translated by the Governor-elect, Hon. John D. Long; besides accounts of the Lives and Works of Spenser, Burns, Goldsmith, Goethe, Schiller and Moliere.

In the department of literature have been added all the Foreign Classic Series, all the Ancient, Greek and Latin, Classic Series, the accounts of English Men of Letters, and many other works of great value. We have Bayard Taylor's "Studies in German Literature" and Weisse's "Lectures on the Origin and Progress of the English Language."

In the department of useful arts one may find valuable works on the phonograph, telephone, and latest inventions. In the department of fine arts may be found "Art in the House," by Von Falke; "Artists of the Nineteenth Century and Their Works," by Clara E. Clement and Lawrence Hutton; "Renaissance in Italy," by Symonds; "The Book of American Interiors," by Elliott; also Ruskin's work on Painting and Luecke's "History of Architecture."

Of scientific works a good list has been purchased, including Proctor's "Myths and Marvels of Astronomy"; Simmonds'

"Commercial Products of the Sea"; Helmholtz's "Lectures on Scientific Subjects"; Wallace's "Tropical Nature, and Other Essays"; Barr's "Combustion of Coal"; Rood's "Modern Chromatics"; Damon's "Ocean Wonders, Illustrated from Living Objects"; Jeffries on "Color Blindness," and the Series of Half-Hour Recreations in Modern Science, published by Estes & Lauriat.

Several valuable works in the *French Language* have been added to the Library, and if our French people will take the trouble to inquire for them at the counter of the Library, the Librarian will give them an opportunity to select. The collection consists of approved works in history, general literature, and especially, fiction.

As usual, a large number of works of fiction have been placed upon the shelves. We have not noted their titles, for they embrace every respectable novel published during the year. All the works of all the best novelists are purchased as soon as published.

The Board acknowledge with pleasure the receipt of full files of the *Lowell Morning Times*, the *Vox Populi*, and *Weekly Sun*. The preservation of the files of local papers is of great historical value. We have complete files, to 1878, of the *Daily Courier* and *Daily Citizen*; and it is greatly to be hoped that our shelves may contain complete files of all our local papers. A copy of every publication, pertaining to all our manufactories and industries and institutions, should be sent to the Library, and the same be carefully kept for historical and commercial uses.

Finally, the Board have just purchased the valuable work by George Tryon, Jr., on the Mollusious Animals, being the first complete manual of this important family of invertebrates. The work is to be issued in quarterly parts, the publication occupying several years.

Our grateful acknowledgments are due to the *Morning*

Mail and *Vox Populi* for publishing, gratis, monthly lists of books added to the Library; also to the various donors of books and pamphlets whose names appear in the appendix to this Report. Many of these gifts are of much value.

During the past year many books have been rebound, and many pamphlets and serial publications bound for the first time. The prices paid have been moderate, and the work itself has been done in the best style. The printing for the present year has also been done much less than has often been paid for a corresponding amount of labor. For the accommodation of the patrons, an ice cooler has been placed near the delivery counter, which has proved a great blessing, especially in the warm months.

At the beginning of the present year, Mr. Marshall H. Clough, who had served as Librarian most acceptably, for several years, was succeeded by the present Librarian, Mr. Joseph A. Green. The latter necessarily encountered all the many difficulties incident to a situation so responsible as that of the management of a large library. He has labored earnestly and faithfully in the face of these difficulties, and has spared neither time nor pains to do the best in his power for the interests of the Library. Such duties as pertain to the office of a librarian cannot be wholly learned in a single year; but his success has been all that ought reasonably to have been expected.

One of the two assistants, Mr. Walter H. Gilman, in service at the beginning of the year, still remains in that capacity. He has served the Library long and well; the other assistant, Mr. John F. Burrill, resigned recently, and his place has been filled by Mr. Stephen T. Wyman.

At no distant day the Library ought to be classified according to some approved plan, having already reached the size of more than 20,000 volumes, all of which are arranged without regard to any system. It is now difficult to use the

Library for special objects. We do not know how many or what books upon a given subject the Library contains. A very convenient and strictly scientific method of classifying the books of a library has now been prepared by the Amherst College Library. All books are divided into nine classes, which are both logical and scientific divisions. Each of these classes is divided into nine or less families, and each family into nine or less genera, and still lower subdivisions into species can be made. Divisions, no more than nine in number, can easily be made in all cases. This plan is a decimal system, and is analagous to, and equally as convenient as the metric system of weights and measures. The plan can, with little effort, be understood by all readers. If the principle were carried out in all libraries, they would be much more available for working purposes. Many of the best libraries in our country use a similar method of book classification already.

The Board acknowledge the generous appropriation by the present city government, and beg the incoming government to remember with favor the claims of the Library.

All of which is respectfully submitted.

JOHN A. G. RICHARDSON,
JOHN A. SMITH,
GEORGE E. STANLEY,
J. L. SEWARD,
GARDNER W. KING,
FREDERICK TAYLOR,
EDWARD W. THOMPSON,
EDW. B. PEIRCE,

Directors.

LIST OF DONORS TO THE LIBRARY, 1879.

| | Volumes | Pamph. | Papers. |
|---|---------|--------|---------|
| American Unitarian Association | 1 | 12 | |
| Asher & Co., London | | 1 | |
| Barnwell, James G. | 1 | | |
| Bicknell & Comstock, New York | | 3 | |
| Bird, Frank W., Boston | | 1 | |
| Bossange & Ballande, Paris | | 1 | |
| Boston Public Library | | 5 | |
| Bowditch, William L., Boston | 1 | | |
| Brookline Public Library | | 1 | |
| Bryan, Clark W., Springfield | | 1 | |
| Chapin, H. D., Chicago | | | 1 |
| Chicago Public Library | | 1 | |
| Cleveland Public Library | | 1 | |
| Clough, Marshall H., Lowell | 1 | | |
| Cobden Club, London | | 1 | 3 |
| Conley, Edward, & Co., Holyoke | | 2 | |
| Dickenson, J. W., State Library | | 1 | |
| Dodd, Mead & Co., New York | | 1 | |
| Dufosse, E., Paris | | 4 | |
| Essex Institute, Salem | | 1 | |
| Estes & Lauriat, Boston | | 2 | |
| Fall River Public Library | | 1 | |
| Ferguson, Levi, Esq., Lowell | 2 | | |
| Ferre & Co, Philadelphia | | | 10 |
| Foote, A. E., Philadelphia | | 1 | |
| Franklin Fire Insurance Co., Philadelphia | 1 | | |
| Gilman, Alfred, Lowell | 1 | | |
| Hartford Library Association | | 1 | |
| Haverhill Public Library | | 1 | |
| Hindley, Charles, London | | 1 | |
| Houghton, Osgood & Co., Boston | | 2 | 4 |
| Howgate, H. W., United States Army | | 1 | |
| Ingham, Clark & Co., Cleveland | | | 1 |
| Lawrence, Abbott, Boston | 1 | | |
| Lawrence Public Library | | 5 | |
| Library of Congress | | 1 | |
| Lippincott & Co., Philadelphia | | 1 | |
| Lothrop, D., & Co., Boston | | 1 | |
| Lovering, A. W., Boston | | 1 | |
| Lowell Missionary Society | | 1 | |
| Lynn Public Library | | 1 | |
| Macullar, Williams & Parker, Boston | 1 | | |
| Manley, H. A., & Co. | 1 | | |
| McPhail, H. A. C., Santa Barbara, Cal. | 1 | | |
| Amount carried forward | 12 | 58 | 19 |

LIST OF DONORS TO THE LIBRARY, 1879.

| | Volumes | Pamph. | Papers. |
|---|---------|--------|---------|
| Amount brought forward | 12 | 58 | 19 |
| Mercantile Library Association, New York . . . | | 1 | |
| Merramin, R. S., Philadelphia | | 1 | |
| Mullins, J. D., London | | 1 | |
| Munn & Co., New York | | | 1 |
| National Temperance Advocate, New York . . . | | 1 | |
| Nelson & Ropes, Boston | | 1 | |
| New Bedford Public Library | | 1 | |
| Newton Public Library | | 1 | |
| Noyes, L. W., Chicago | | | 1 |
| Peabody Institute | | 1 | |
| Perry Mason & Co., Boston | | 2 | |
| Peterson, T. B., Philadelphia | | 2 | 6 |
| Portland Public Library | 1 | 2 | |
| Prince Society, Boston | | 1 | |
| Providence Public Library | | 1 | |
| Putnam, G. P., & Sons, New York | | 2 | |
| Reinwald, C., Paris | | 6 | |
| Robinson, F. W., Philadelphia | | 1 | |
| Russell, Hon. William A. | 1 | | |
| St. Louis Public Library | | 2 | |
| Scientific Publishing Co., New York | | 3 | |
| Scribner & Welford, New York | | 4 | |
| Smith, A. R., London | | 1 | |
| Smith, John A., Lowell | 1 | | |
| Spooner, Thomas, Glendale, O. | | 1 | |
| Springfield Public Library | | 1 | |
| Souveau, L., Easton, Pa. | | 1 | |
| Taunton Public Library | | 1 | |
| Tufts College | | 3 | 1 |
| United States Chief of Ordnance | 1 | | |
| United States Commissioner of Agriculture . . . | 1 | | |
| United States Commissioner of Education . . . | 1 | | |
| United States Patent Office | 2 | 56 | |
| United States Treasury Department | 1 | | |
| University Council, Boston | 1 | | |
| Weeks, Joseph D., Pittsburg. | 1 | | |
| Whittingham, Charles, London | | | 1 |
| Williams, A., & Co., Boston. | | | 1 |
| Woburn Public Library | | 1 | |
| Total | 23 | 157 | 30 |

ANNUAL REPORT
OF THE
BOARD OF HEALTH

OF THE
CITY OF LOWELL,

FOR THE YEAR 1879.



LOWELL:
LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and sent to the Common Council.

SAMUEL A. McPHETRES, City Clerk.

IN COMMON COUNCIL, January 27, 1880

Received and read.

DAVID CHASE, Clerk.

REPORT.

OFFICE BOARD OF HEALTH, }
Lowell, January, 1880. }

To the City Council:

In accordance with the requirement of the general law, passed by the Legislature of Massachusetts during the session of 1877, relating to the public health, we herewith submit our second annual report.

The work of the Board of Health, as in the previous year, has been principally confined to the abatement of nuisances and the inspection of tenement houses, alleys, back yards, cellars and house-drainage. Allow us to present, through you, to the citizens of Lowell, our congratulations for the general good health of our city, and the great reduction of the death rate from preventable diseases.

During the year, there has been abated, by order of the Board, a very large number of nuisances, such as filthy cellars, stables, hog-pens, yards, exposed manure heaps, full privies, defective drainage, &c.

April 22, 1879, this Board made the following regulation:—
“Ordered that no vault or privy shall be opened between the first day of June and the first day of October, inclusive, without a permit from the Board of Health, nor in any other mode or at any other time than they may direct and appoint. No permit will be granted to empty privy vaults except by an odorless process.”

During the time that this order was in force there were emptied in the day time (to the entire satisfaction of this Board and the citizens generally) one hundred and eighty privy vaults, by the Odorless Excavating Company. No intelligent person can fail to appreciate the advantages of this process, that relieves the community not only of a most grievous nuisance, but also of a frightful source of disease. There can be no doubt that the large decrease in the death rate of children under five years of age, of cholera infantum and other filth diseases, is largely due to the prohibition of the old night-cart system.

It is understood that this company has contracts for emptying the vaults of nearly all the manufacturing companies in the city. This Board earnestly recommends that the City Council contract with some responsible party for emptying all privy vaults in the city by the odorless process.

A resolution was passed by the last council, requesting the Board of Health to locate and build a bath-house in Ward Six. This Board complied by locating and building one on Concord River, above the railroad bridge. The house was opened about the middle of June, and was very largely patronized from that time until the first of September, a great many days it being used by more than five hundred persons. One day in each week the house was reserved for females, when two or three hundred would avail themselves of its privileges. A large proportion of the preventable diseases is engendered by uncleanness, much of which might be removed by the city's providing sufficient and suitable public bathing facilities.

Many of our school-houses are almost entirely wanting in ventilation, and are rendered uncomfortable and unwholesome by overcrowding, and, with the addition of defective water closets and offensive privies, cause education, which is the "bulwark of our republican institutions," to be profitless to quite a large number of pupils. The attention of the committees on education and public buildings is respectfully called to this subject.

The last City Council passed an order directing the Board of Health to locate and maintain two or more public urinals on the public streets of the city, and charge the expense to the health appropriation. No action has been taken by the Board in the matter, for the reason that the appropriation was insufficient for its present work, and also because it was ascertained that neither the Board of Health nor the City Council has authority to locate and maintain urinals in the public streets of the city.

It is acknowledged and conceded by the best medical authorities that the corpses of persons who have died of scarlet fever, diphtheria, or any malignant or contagious disease, are eminently capable of disseminating the poison of their maladies. The custom of conveying the bodies of children to the grave in hackney coaches should be prohibited. There is no doubt that, during the hour the bodies are confined in the coach, the lining and wadding will absorb enough of the germs of the disease to infect the next occupants of the carriage. By this means contagious diseases are frequently spread, which fact may account for many isolated cases of scarlet fever. It may also explain the cause of diphtheria in those localities where all the sanitary conditions are known to be good.

A good system of sewerage is of the utmost importance to a city. No less so is good drainage to every family in the community. If there were no danger from soakage of chamber-slops into the soil, or from storage of filthy water in sink-holes near our dwellings, it would be very desirable to have good drainage simply for its cleanliness.

During the spring and summer, the Board of Health petitioned the Board of Aldermen to lay sewers in the following streets: Somerset, Coburn, Agawam, River, Keene, Prospect and High Streets. Hearings were given by the committee on sewers. In some cases, where the sanitary condition of the premises was in the worst possible condition on account of the lack of drainage, the owners would appear and oppose the laying of a sewer on account of the small assessment to which they would be liable. Quite a number of very respectable persons appeared before the committee and stated that they were opposed to laying a sewer, because they had all the drainage they considered necessary. These were provided only with a sink-hole on their premises, or drained their sink and slops into their barn cellars, there to be stored, a breeder of nearly all filth and preventable diseases.

The Committee on Sewers, aware of the necessity of providing means for the conveyance of all waste water from the premises of citizens, have promptly recommended the laying of every sewer petitioned for by this Board, and by the citizens, when it could be laid without too great an expense, and we wish here to express our grateful appreciation of their co-operation with us in our endeavor to improve the sanitary condition of the city.

The important question is, how to ventilate the common sewer. Sanitary engineers, who have given the subject a great deal of attention and study, after experimenting with stand pipes, ventilating into large chimneys, with house conductors, furnaces, blowers, exhaust fans and other meehanieal apparatus, have found all these to fail in accomplishing the work. It is believed that the common sewer can be perfectly ventilated by frequent openings. The manhole covering in the streets should be replaced by a grating as open as can be used with safety, and, when manholes are not frequent enough to properly ventilate the sewer, ventilating pipes should be put into the sewer with the same covering as is used for manholes.

The following is a statement of the expenses of the Board of Health during the year :

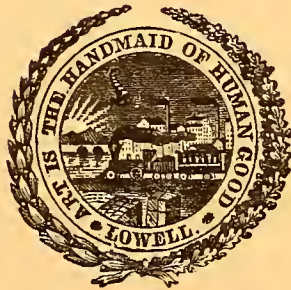
| | |
|---|-----------|
| Paid J. W. B. Shaw, Chairman, (salary)..... | \$300 00 |
| “ Michael Hoar..... | 200 00 |
| “ For constructing bath-house..... | 963 30 |
| “ Public bathing..... | 557 85 |
| “ Cleaning streets..... | 717 82 |
| “ Sundries..... | 33 24 |
| | <hr/> |
| | \$2772 21 |

Respectfully submitted,

J. W. B. SHAW,
MICHAEL HOAR,
E. W. TRUEWORTHY.



ANNUAL REPORT
OF THE
CITY PHYSICIAN
AND
SUPERINTENDENT OF BURIALS
OF THE
CITY OF LOWELL,
FOR THE YEAR 1879.



LOWELL:
LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and sent to the Common Council.

SAMUEL A. McPHETRES, *City Clerk*.

IN COMMON COUNCIL, January 27, 1880.

Received and read.

DAVID CHASE, *Clerk*.

REPORT.

OFFICE OF THE CITY PHYSICIAN AND SUPERINTENDENT OF BURIALS, }
Lowell, January, 1880. }

To the City Council:

GENTLEMEN:—In obedience to a city ordinance, I herewith present for your consideration a tabulated list of the deaths in each month during the year 1879, with the cause, age and sex. I am happy to report that the past year has been unusually healthy, and that the death rate has been less than any previous year of the past decade, and the actual number of deaths less than any year since 1870, notwithstanding our increase of population. This speaks well for the sanitary condition of our city, and here allow me to state that much credit is due Mr. Shaw, chairman of our local board of health, for his indefatigable efforts in preventing epidemics, endemics, and otherwise preserving the health of our city. The result of his labor is seen in the decrease of the death rate from those zymotic diseases, namely, diseases which are known to have their origin from neglect of hygienic precautions, and which are preventable by enforcement of hygienic and sanitary measures.

The greatest ratio of deaths has occurred among our foreign population who occupy rented tenement-houses, many of which are not fit for human habitation. To this fact I wish to call your attention, that you may devise measures whereby these unfortunate beings can have

a more bountiful supply of those health-giving elements, pure water, pure air and good light.

Our almshouse is a model sanitary institution. I have frequently inspected its premises, and have always found them in a good sanitary condition. There has been but little sickness here during the year, and most of the deaths which have occurred have been from constitutional and local causes.

Total number of visits made during the year, 2,367. This includes cases of confinement and several cases of surgery. Visits to almshouse and police-station, 63; vaccinations, 173; office calls, 1,467.

There has been a greater demand for the services of the city physician than I have been able to supply in a satisfactory manner. I have not only been requested to attend to the sick paupers and patients under the care of the city authorities, but I have been requested to attend to a great many of the sick poor of Lowell. This unlimited demand for the services of the city physician makes it impossible to do justice to those who really are entitled to his services. Therefore it would be well to limit the duties of the city physician or employ more of his time.

There were 1,006 deaths during the year, a decrease of 82 from the number of deaths the preceding year. This represents an annual death rate of 18.3 per 1,000, assuming 55,000 to be the existing population. Among the leading causes of death were consumption, 193, disease of brain, 72, disease of heart, 45, diarrhoeal diseases, 101, pneumonia, 80. Those dreaded diseases, diphtheria and scarlatina, have been comparatively very mild, 21 deaths having occurred from the former and 12 from the latter. Fatality among children under five years of age has diminished wonderfully for the past year, 346 deaths having occurred, against 437 the year before. Of the 1,006 deceased, 656 were born in the United States, 339 in foreign countries; birth-place of 11 not obtainable; 675 were of foreign-born parents, 252 were of American-born parents, and, of the remaining 79, nativity of parents unknown. There were 94 interments in the Lowell Cemetery, 206 in the Edson Cemetery, 563 in the Catholic Cemetery, 25 in other yards of Lowell, and 118 removed from the city.

EDWIN W. TRUEWORTHY,

City Physician and Superintendent of Burials.

TABLE 1.

SHOWING THE MORTALITY FOR THE YEAR ENDING DECEMBER 31st 1879, AND THE NUMBER OF DEATHS OF EACH MONTH.
WITH THE CAUSE, AGE AND SEX.

| CAUSE OF DEATH. | Total Deaths during the year. | Number of Deaths each month during the year ending December 31, 1879. | | | | | | | | | | | | Under 1 year. | 1 to 2 years. | 2 to 3 years. | 3 to 4 years. | 4 to 5 years. | Tot. under 5 yrs. | 5 to 10 years. | 10 to 20 years. | 20 to 30 years. | 30 to 40 years. | 40 to 50 years. | 50 to 60 years. | 60 to 70 years. | 70 to 80 years. | 80 to 90 years. | 90 to 100 years. | Sex. | | Colored. | |
|--|-------------------------------|---|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|---------------|---------------|---------------|---------------|---------------|-------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-------|---------|----------|-------|
| | | January | February | March | April | May | June | July | August | September | October | November | December | | | | | | | | | | | | | | | | | Male. | Female. | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Deaths from all causes..... | 1006 | 105 | 69 | 78 | 83 | 73 | 70 | 108 | 97 | 75 | 92 | 74 | 82 | 213 | 67 | 32 | 16 | 18 | 346 | 33 | 56 | 122 | 81 | 85 | 70 | 101 | 75 | 32 | 5 | ..... | ..... | ..... |  |
| Total Zymotic Diseases..... | 230 | 14 | 8 | 10 | 14 | 10 | 14 | 45 | 43 | 29 | 23 | 10 | 10 | 108 | 26 | 14 | 11 | 9 | 168 | 16 | 12 | 8 | 2 | 8 | 4 | 18 | 2 | 1 | ..... | ..... | ..... | ..... |  |
| Total Constitutional Diseases..... | 256 | 29 | 24 | 15 | 19 | 29 | 22 | 17 | 15 | 16 | 28 | 19 | 23 | 13 | 2 | 5 | 1 | ..... | 21 | 4 | 28 | 76 | 37 | 34 | 26 | 18 | 9 | 3 | ..... | ..... | ..... | ..... |  |
| Total Local Diseases..... | 360 | 47 | 24 | 40 | 38 | 22 | 24 | 33 | 33 | 18 | 29 | 29 | 33 | 57 | 32 | 10 | 3 | 5 | 107 | 10 | 10 | 27 | 28 | 28 | 35 | 63 | 43 | 9 | ..... | ..... | ..... | ..... |  |
| Total Developmental Diseases..... | 111 | 10 | 8 | 12 | 9 | 8 | 8 | 7 | 10 | 6 | 10 | 10 | 13 | 32 | 6 | ..... | ..... | 1 | 39 | 10 | 3 | 5 | 7 | 4 | 2 | 8 | 20 | 19 | 4 | ..... | ..... | ..... |  |
| Deaths by violence..... | 38 | 3 | 3 | 1 | 3 | 3 | 2 | 4 | 5 | 4 | 2 | 6 | 2 | 1 | 2 | 1 | 3 | 7 | ..... | 2 | 3 | 5 | 7 | 10 | 2 | 2 | 3 | ..... | ..... | ..... | ..... | ..... |  |
| Apoplexy..... | 9 | 3 | 1 | 1 | ..... | 1 | 1 | ..... | ..... | 1 | ..... | 1 | ..... | 1 | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | 1 | 2 | ..... | ..... | 3 | ..... | 3 | 6 | ..... | ..... |  |
| Asphyxia..... | 2 | 1 | ..... | ..... | 1 | 1 | 1 | 2 | ..... | 1 | ..... | 1 | ..... | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | 2 | ..... | 1 | 1 | ..... | 2 | 3 | 3 | ..... | ..... |
| Asthma..... | 6 | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... |
| Alcoholism..... | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Anæmia..... | 8 | ..... | 3 | 1 | ..... | ..... | ..... | 1 | 1 | ..... | 2 | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 | ..... | ..... | ..... | 3 | ..... | ..... | 2 | 6 | ..... | ..... | ..... |
| Accident..... | 29 | ..... | 2 | 1 | 2 | 3 | 2 | 4 | 5 | 2 | 2 | 4 | 2 | ..... | ..... | 2 | 1 | 3 | 6 | 2 | 3 | 4 | 4 | 7 | 1 | 2 | ..... | ..... | 10 | 9 | 1 | ..... | ..... |
| Abscess..... | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Anthrax..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... |
| Bronchitis and Catarrh..... | 23 | 1 | 3 | 2 | 1 | ..... | 3 | 1 | 2 | 1 | 2 | 3 | 4 | 8 | 2 | ..... | 1 | 12 | ..... | ..... | 1 | ..... | 1 | 1 | 1 | 4 | 3 | 1 | ..... | 12 | 11 | ..... | ..... |
| Cystitis..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Consumption..... | 193 | 25 | 18 | 12 | 17 | 22 | 15 | 13 | 11 | 13 | 20 | 11 | 16 | 8 | 1 | 4 | ..... | ..... | 13 | 1 | 26 | 70 | 35 | 22 | 13 | 8 | 3 | 2 | ..... | 79 | 114 | 1 | ..... |
| Cancer..... | 25 | 3 | 1 | 1 | 2 | 3 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 8 | 9 | 2 | 5 | 25 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4 | 21 | ..... | ..... |
| Croup..... | 26 | 4 | 2 | 2 | 2 | 1 | 2 | 2 | ..... | 1 | 3 | 3 | 4 | 1 | 8 | 9 | 2 | 5 | 25 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Convulsions..... | 20 | ..... | 1 | 2 | 3 | ..... | 1 | 3 | 4 | 1 | 2 | 1 | 2 | 12 | 5 | 2 | ..... | ..... | 19 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 13 | 7 | ..... | ..... |
| Childbirth..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Diphtheria..... | 21 | 2 | 1 | 3 | ..... | 2 | 4 | ..... | ..... | 1 | 6 | 1 | 1 | 2 | 2 | 2 | 2 | 10 | 10 | 1 | 1 | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 9 | 12 | ..... | ..... |
| Debility..... | 23 | 1 | 3 | 2 | 2 | 1 | 2 | ..... | ..... | 4 | 2 | 2 | 1 | 9 | ..... | ..... | ..... | ..... | 9 | 1 | 1 | 1 | 1 | 2 | 5 | 3 | ..... | ..... | 12 | 11 | ..... | ..... |  |
| Disease of Heart..... | 45 | 8 | 3 | 4 | 4 | 1 | 2 | 2 | 2 | 4 | 2 | 2 | 8 | 3 | ..... | ..... | ..... | ..... | 3 | 1 | 5 | 5 | 3 | 7 | 7 | 11 | 1 | ..... | 20 | 25 | ..... | ..... |  |
| Disease of Brain..... | 72 | 7 | 5 | 7 | 9 | 4 | 6 | 7 | 6 | 5 | 5 | 5 | 4 | 20 | 17 | 2 | 1 | 4 | 44 | 5 | 3 | 2 | 3 | 4 | 3 | 3 | ..... | ..... | 31 | 41 | ..... | ..... |  |
| Disease of Kidneys..... | 23 | 1 | ..... | 1 | 5 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 1 | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 2 | 2 | 3 | 3 | 7 | 3 | ..... | 12 | 11 | ..... | ..... | ..... |
| Disease of Liver..... | 14 | 2 | 1 | 3 | 2 | 1 | 1 | 1 | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 9 | 5 | ..... | ..... |
| Diabetes..... | 2 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Diarrhoeal Diseases..... | 101 | ..... | 1 | 2 | ..... | 1 | 35 | 37 | 18 | 7 | ..... | ..... | 70 | 13 | 1 | 2 | ..... | 86 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 50 | 51 | ..... | ..... |
| Dropsy..... | 16 | 1 | 1 | 1 | ..... | 2 | 1 | ..... | 2 | ..... | 3 | 3 | 2 | 1 | ..... | ..... | ..... | ..... | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 1 | ..... | ..... | ..... | 8 | 8 | ..... | ..... |
| Dentition..... | 3 | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 2 | ..... | ..... |
| Exposure to cold..... | 2 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Erysipelas..... | 6 | ..... | ..... | ..... | 2 | 1 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Embolism..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fever, Typhoid..... | 22 | 5 | 1 | ..... | 2 | 1 | 1 | 2 | 3 | 1 | 5 | ..... | 1 | ..... | ..... | ..... | 1 | 2 | 2 | 12 | 2 | 2 | 1 | 1 | 1 | ..... | ..... | ..... | ..... | 7 | 15 | ..... | ..... |
| Fever, Scarlet..... | 12 | 1 | 1 | ..... | 2 | 1 | 2 | 1 | ..... | 1 | ..... | 3 | ..... | 2 | 2 | 2 | 3 | ..... | 7 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5 | 7 | ..... | ..... |
| Gastritis, Enteritis and Colitis..... | 16 | 1 | 1 | ..... | ..... | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 3 | 2 | ..... | ..... | ..... | ..... | 2 | ..... | ..... | 1 | 4 | 3 | 2 | 2 | 1 | ..... | ..... | 9 | 7 | ..... | ..... |
| Hæmorrhage..... | 12 | 1 | 2 | ..... | ..... | 1 | 2 | 3 | ..... | 2 | ..... | 1 | 1 | 1 | ..... | ..... | ..... | ..... | 2 | ..... | ..... | 2 | 3 | 3 | 2 | ..... | ..... | ..... | ..... | 4 | 8 | ..... | ..... |
| Intussusception..... | 2 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Influenza..... | 2 | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Infantile Debility..... | 31 | ..... | ..... | 2 | 6 | 1 | 2 | 4 | 2 | 6 | 2 | 2 | 4 | 31 | 1 | ..... | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 20 | 11 | ..... | ..... |
| Inanition..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Marasmus..... | 24 | 1 | ..... | 2 | 2 | 2 | ..... | 3 | 3 | 1 | 5 | 3 | 2 | 15 | 4 | ..... | ..... | 19 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 11 | 13 | ..... | ..... |
| Miscarriage..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Measles..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Old Age..... | 41 | 7 | 8 | 3 | 3 | 4 | 3 | 1 | 3 | 1 | 1 | 4 | 8 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... |
| Pyæmia..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Paralysis..... | 22 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 3 | 4 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 10 | 12 | ..... | ..... |
| Peritonitis..... | 18 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 6 | 12 | ..... | ..... |
| Pneumonia and Congestion of Lungs..... | 80 | 16 | 7 | 15 | 12 | 8 | 1 | 3 | 1 | 1 | 4 | 5 | 7 | 8 | 7 | 4 | 2 | ..... | 21 | 2 | 3 | 6 | 6 | 1 | 1 | 2 | ..... | ..... | 36 | 44 | ..... | ..... | ..... |
| Premature Birth..... | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |  |

TABLE 2.

DEATHS IN EACH MONTH FOR THE LAST TEN YEARS.

| MONTHS. | 1870 | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | Total each month for ten years. |
|----------------|------|------|------|------|------|------|------|------|------|------|---------------------------------|
| January..... | 87 | 89 | 66 | 82 | 88 | 76 | 80 | 120 | 64 | 105 | 857 |
| February..... | 84 | 66 | 80 | 82 | 83 | 78 | 57 | 88 | 78 | 69 | 765 |
| March.. | 73 | 72 | 89 | 86 | 96 | 82 | 81 | 97 | 104 | 78 | 879 |
| April..... | 61 | 78 | 75 | 91 | 104 | 80 | 75 | 84 | 84 | 83 | 815 |
| May. | 58 | 77 | 94 | 82 | 89 | 99 | 67 | 77 | 82 | 73 | 798 |
| June..... | 69 | 75 | 68 | 68 | 67 | 76 | 69 | 63 | 78 | 70 | 693 |
| July..... | 116 | 119 | 137 | 153 | 99 | 81 | 160 | 87 | 132 | 108 | 1192 |
| August..... | 103 | 119 | 113 | 141 | 139 | 129 | 137 | 112 | 127 | 97 | 1217 |
| September..... | 76 | 135 | 114 | 119 | 143 | 97 | 128 | 81 | 121 | 75 | 1089 |
| October..... | 82 | 88 | 72 | 107 | 96 | 84 | 119 | 86 | 78 | 92 | 904 |
| November..... | 70 | 54 | 69 | 65 | 90 | 60 | 91 | 64 | 58 | 74 | 508 |
| December..... | 73 | 61 | 71 | 85 | 90 | 78 | 83 | 68 | 82 | 82 | 773 |
| Total..... | 952 | 1033 | 1048 | 1161 | 1184 | 1020 | 1147 | 1027 | 1088 | 1006 | |

TABLE 3.

NUMBER OF DEATHS FROM SOME OF THE MOST PREVALENT DISEASES IN THE LAST TEN YEARS.

| DISEASES OR CAUSES OF DEATH. | 1870 | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | Total 10 yrs |
|------------------------------|------|------|------|------|------|-------|------|------|-------|-------|--------------|
| Dropsy of Brain..... | 10 | 11 | 15 | 16 | 21 | 4 | 5 | 7 | ..... | ..... | 89 |
| Cholera Infantum..... | 70 | 35 | 84 | 82 | 135 | 105 | 119 | 63 | 96 | 86 | 785 |
| Consumption..... | 151 | 168 | 225 | 207 | 184 | 212 | 188 | 176 | 191 | 193 | 1888 |
| Croup..... | 28 | 15 | 20 | 21 | 34 | 39 | 63 | 42 | 28 | 26 | 316 |
| Disease of Heart..... | 38 | 26 | 35 | 46 | 47 | 46 | 40 | 40 | 45 | 45 | 403 |
| Dysentery..... | 8 | 2 | 15 | 10 | 7 | 6 | 12 | 4 | 20 | ..... | 84 |
| Infantile | 50 | 36 | 77 | 64 | 48 | 62 | 46 | 58 | 67 | 31 | 539 |
| Inflammation of Lungs... | 46 | 54 | 58 | 80 | 61 | 51 | 47 | 40 | 53 | 80 | 570 |
| Marasmus..... | 22 | 8 | 17 | 50 | 32 | ..... | 22 | 16 | 21 | 24 | 212 |
| Scarlet Fever..... | 10 | 32 | 12 | 57 | 100 | 19 | 5 | 3 | 2 | 12 | 252 |
| Typhoid Fever..... | 33 | 28 | 66 | 56 | 42 | 34 | 20 | 21 | 24 | 22 | 348 |
| Diphtheria..... | 3 | 8 | 7 | 4 | 17 | 16 | 158 | 142 | 62 | 21 | 438 |

TABLE 4.

DEATHS IN LOWELL SINCE ITS INCORPORATION.

| | | |
|--------------|--------------|---------------|
| 1827.....50 | 1845.....363 | 1863.....695 |
| 1828.....32 | 1846.....690 | 1864.....633 |
| 1829.....66 | 1847.....948 | 1865.....575 |
| 1830.....103 | 1848.....825 | 1866.....749 |
| 1831.....117 | 1849.....903 | 1867.....640 |
| 1832.....178 | 1850.....492 | 1868.....875 |
| 1833.....211 | 1851.....629 | 1869.....763 |
| 1834.....221 | 1852.....604 | 1870.....952 |
| 1835.....229 | 1853.....734 | 1871.....1033 |
| 1836.....253 | 1854.....834 | 1872.....1048 |
| 1837.....301 | 1855.....766 | 1873.....1161 |
| 1838.....407 | 1856.....790 | 1874.....1184 |
| 1839.....340 | 1857.....818 | 1875.....1020 |
| 1840.....407 | 1858.....626 | 1876.....1147 |
| 1841.....434 | 1859.....736 | 1877.....1027 |
| 1842.....473 | 1860.....720 | 1878.....1080 |
| 1843.....364 | 1861.....713 | 1879.....1006 |
| 1844.....362 | 1862.....641 | |

TABLE 5.

NATIVITY OF THOSE DECEASED DURING THE YEAR 1879.

| | |
|--------------|-----|
| Native..... | 656 |
| Foreign..... | 339 |
| Unknown..... | 11 |

NATIVITY OF PARENTS.

| | |
|--------------|-----|
| Native..... | 252 |
| Foreign..... | 675 |
| Unknown..... | 79 |

ANNUAL REPORT

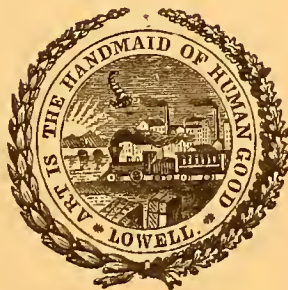
OF THE

Births, Marriages and Deaths

IN THE

CITY OF LOWELL,

FOR THE YEAR 1879.



LOWELL:

LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.

1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, February 24, 1880.

Read and sent down.

SAMUEL A. McPHETRES, *City Clerk*.

IN COMMON COUNCIL, February 24, 1880.

Received and read.

DAVID CHASE, *Clerk*.

REPORT.

CITY CLERK'S OFFICE, }
Lowell, February, 24, 1880. }

To the City Council:

Gentlemen—I have the honor to submit the Annual Report of Births, Marriages and Deaths in the City of Lowell during the year 1879.

BIRTHS.

The number of children born alive during 1879 was 1,412, an increase of 80 over 1878, and 47 more than in any previous year in the history of Lowell. There were 775 males and 637 females reported, or in the proportion of 121.6 male births to 100 females born. While the male births are always larger than the female, the proportion in our city for the last year, indeed for the last four years, has been very large. In 1876 there were born in the proportion of 113.5 males to 100 females; in 1877, 108.2 males to 100 females; in 1878, 108.1 to 100, and, in 1879, 121.6 to 100. Referring to the Registration Report for the State of Massachusetts for 1878, it is reported that, for the entire State in that year, there were 105.9 male births to 100 female, and, in 1877, 105.3 to 100. A table of the entire number from 1852 to 1876, inclusive, a period of 25 years, shows 461,210 male births to 435,630 females born in the State, a proportion of 105.9 male to 100 female births, exactly what it was in 1878. Why the proportion of Lowell is so much larger than the balance of the State the compiler submits to those learned in such questions. Last year two colored births were reported, both females, and there were 12 illegitimates, below the average of the State for the past six years. There were reported 31 still-births. There were 17 pairs of twins; 8 pairs of boys, 5 pairs of girls, and, in four cases, 1 of each sex.

During the past two years the births were reported by wards as follows :

| Year. | 1878. | 1879. | Year. | 1878. | 1879. |
|-----------------|-------|-------|------------------|-------|-------|
| Ward One, . . . | 265 | 265 | Ward Four, . . . | 173 | 203 |
| Two, . . . | 197 | 174 | Five, . . . | 224 | 252 |
| Three, . . . | 268 | 291 | Six, . . . | 205 | 227 |

Ward One remains the same ; Ward Two loses 23 ; Ward Three gains 23 ; Ward Four gains 30 ; Ward Five gains 28 ; Ward Six gains 22 ; total gain, 80.

By months the following report is made for 1879 : January, 118 ; February, 82 ; March, 120 ; April, 104 ; May, 101 ; June, 121 ; July, 126 ; August, 124 ; September, 124 ; October, 116 ; November, 120 ; December, 155. During first quarter, 320 ; second quarter, 326 ; third quarter, 374 ; fourth quarter, 391. The date of one birth is not reported. It will be seen that 22.66 per cent. of the births occurred in the first quarter ; 23.08 in the second quarter ; 26.48 in the third quarter, and 27.68 in the fourth quarter of the year, varying a trifle from the proportion of the entire State for a period of fifteen years ending with 1878, the following figures being given in the Registration Report : First quarter, 22.92 ; second, 23.47 ; third, 26.74 ; fourth, 26.87.

The nativities of the parents of the children born are returned as follows :

| | Fathers. | Mothers. |
|--|----------|----------|
| Born in United States, | 518 | 556 |
| “ “ Ireland, | 479 | 448 |
| “ “ Canada, | 246 | 253 |
| “ “ England, | 104 | 86 |
| “ “ Scotland, | 20 | 26 |
| “ “ Other Foreign Countries, | 33 | 40 |
| Not reported, | 12 | 3 |
| Total, | 1412 | 1412 |

As compared with 1878 the total increase is 80. The native-born fathers increase 38 ; the mothers, 20. The fathers of Irish birth decrease 1 ; the mothers increase 4. The Canadian-born fathers increase 64 ; the mothers, 69. The English-born fathers increase 3 ; the mothers decrease 6. The Scotch-born fathers decrease 13 ; the mothers increase 1. Fathers born in other foreign countries decrease 3 ; mothers increase 1. Total increase of foreign-born fathers, 50 ; of mothers, 67. The increase of foreign-born parents is entirely due to the population of Canadian birth.

MARRIAGES.

The number of intentions of marriage recorded and issued in 1879 was 666—an increase of 112 over 1878. The number of marriages solemnized in Lowell was 635—or 88 more than in 1878; solemnized elsewhere, but returned and recorded here because one or both parties to the marriage resided in Lowell, 43; making 678 recorded here, or 113 more than in 1878. There were 25 more Lowell persons married outside of the city in 1879 than were recorded in 1878. As the marriages of twelve more couples are recorded than there were certificates issued, it follows that our clergymen gained more in fees than they lost.

The number of certificates issued and marriages recorded in each month are as follows:

| Certificates. Marriages. | | Certificates. Marriages. | |
|--------------------------|---------------|--------------------------|---------------|
| January, . . . | 52 52 | July, . . . | 50 51 |
| February, . . . | 64 69 | August, . . . | 54 54 |
| March, . . . | 33 31 | September, . . . | 54 55 |
| | <hr/> 149 152 | | <hr/> 158 160 |
| April, . . . | 47 52 | October, . . . | 73 73 |
| May, . . . | 51 51 | November, . . . | 72 76 |
| June, . . . | 54 58 | December, . . . | 62 56 |
| | <hr/> 152 161 | | <hr/> 207 205 |

The cold bleak month of March was the least productive of matrimonial alliances, while the festive days of November witnessed the largest number of “blushing brides” led to the altar.

The marriages were solemnized by the following-named clergymen:

BAPTIST—52.

Rev. M. C. Thwing, 18; O. E. Mallory, 15; E. A. Lecompte, 9; T. M. Colwell, 8; N. M. Williams, 2.

CATHOLIC—287.

Rev. Peter Crudden, 71; A. M. Garin, 70; James McGrath, 45; William O'Brien, 33; Michael O'Brien, 27; G. J. Van Laar, 10; J. A. Fournier, 7; William M. O'Brien, 6; Alexander Trudeau, 6; James Campbell, 5; John Ryan, 4; Daniel O'Riordan, 2; M. A. Hunt, 1.

CONGREGATIONALIST—80.

Rev. Smith Baker, 37; C. D. Barrows, 16; J. M. Greene, 15; Owen Street, 5; J. B. Seabury, 5; E. B. Foster, 2.

REPORT OF BIRTHS

EPISCOPAL—41.

Rev. Theodore Edson, 30 ; L. C. Manchester, 6 ; A. E. Johnson, 5.

FREEWILL BAPTIST—34.

Rev. E. W. Porter, 17 ; G. S. Ricker, 17.

METHODIST (EPISCOPAL)—63.

Rev. G. L. Collyer, 33 ; G. L. Westgate, 9 ; C. D. Hills, 8 ; M. B. Chapman, 5 ; G. H. Clarke, 1 ; A. H. Herrick, 1 ; Thomas Haworth, 1 ; N. W. Matthews (Primitive), 5.

PRESBYTERIAN—13.

Rev. Robert Court, 13.

UNITARIAN—12.

Rev. H. C. Duganne, 6 ; J. L. Seward, 5 ; Horatio Wood, 1.

UNIVERSALIST—15.

Rev. G. T. Flanders, 8 ; R. A. Greene, 7.

FRENCH PROTESTANT—6.

Rev. T. G. A. Cote, 6.

NON-RESIDENT CLERGYMEN—46.

JUSTICES OF THE PEACE—29.

The relative number of marriages by resident clergymen of different denominations as compared with 1878 are as follows: Increase, Baptist, 2 ; Catholic, 32 ; Congregationalist, 19 ; Freewill Baptist, 13 ; Methodist, 19 ; Presbyterian, 4 ; Unitarian, 3 ; French Protestant, 4. Decrease, Episcopal, 2 ; Universalist, 3. Total increase, 91.

The nativities of those recorded are as follows :

| | Grooms. | Brides. |
|--|---------|---------|
| Born in United States, | 403 | 422 |
| “ “ Ireland, | 102 | 98 |
| “ “ Canada, | 98 | 95 |
| “ “ England, | 34 | 32 |
| “ “ Scotland, | 14 | 5 |
| “ “ Other Foreign Countries, | 27 | 26 |
| Total, | 678 | 678 |

On a total increase of 113 more recorded, the native-born grooms increased 76 and the brides 109. The grooms born in Ireland decreased 8 and the brides 16. The grooms born in Canada increased 25 and the brides 14. The total foreign-born grooms increased 37 and the brides 4.

Of the 678 marriages recorded it was the first of each in 554 cases ; the first of the groom and second of the bride in 26 cases, and

the first of the groom and the third of the bride in one ease. It was the second of the groom and first of the bride in 62 cases; the second of each in 26 cases, and, in one case, it was the second of the groom and third of the bride. In one ease it was the third of the groom and first of the bride; in three cases the third of the groom and second of the bride; in one ease the "third term" of married life of each, and one groom of 76 years was for the third time married, now, to a bride of 60, it being her fourth marriage, and, in another instance, a groom of 53 espoused his fourth wife, who, at the age of 40, had been twice widowed. One groom of 68 was for the fifth time married, to a bride of 55, it being her third marriage. It was the eighth marriage where one or the other of them had been a contracting party. To sum up, 581 grooms were married for the first time, 89 a second time, 6 a third time, 1 a fourth time and 1 a fifth time. Of the brides 617 were wed for the first time, 55 a second time, 5 a third time and 1 a fourth time. Two grooms were 18 years old; eight were 19, and six were 20 years of age. Of the brides ten were "sweet sixteen" and nine were 17 years old. The oldest couple were a groom of 77 and a bride of 67, the second marriage of each. Two couples were each 18 years of age. One groom of 48 years took for his second wife a maiden of 24, while a young man of 24 summers married a bride of 44 winters, she being, with one exception, the oldest bride wedded for the first time. Of the grooms 37 were over 40 years of age, 17 of whom were upward of 50 years. Of the brides 21 were over 40 years of age, 8 of whom were upward of 50 years of age.

DEATHS.

The number of deaths in 1879 was 1,006 (not including 31 still-births), a decrease of 82 from the number in 1878, and the smallest number reported in any year since 1870. There were 447 males and 559 females, the latter being 112 in excess of the former. The deaths by months were as follows: January, 105; February, 69; March, 78; April, 83; May, 73; June, 70; July, 108; August, 97; September, 75; October, 92; November, 74; December, 82. The united ages of the deceased was 30,464 years, which, divided by 1,006, the number of the deceased, makes the average age of each, 30.02 years, against an average of 26.81 in 1878. The Report of the City Physician and Superintendent of Burials, already submitted, and to be printed in connection with this Report, contains full details

in regard to deaths, and to repeat the statistics in this Report will be unnecessary.

SUMMARY.

There were in Lowell during 1879, 1,412 births, 635 marriages and 1,006 deaths. Taking the State Board of Health's estimate of our population in 1879, there were, in each 1,000 of our population, 26.49 births, 23.82 persons married and 18.87 deaths. The number of births exceeds the deaths 406, the largest excess in any year since 1850, when 966 births and 492 deaths were reported.

Copies of the Births, Marriages and Deaths have been made and forwarded, as required by law, to the Secretary of the Commonwealth.

The usual table is appended to this Report.

Respectfully submitted.

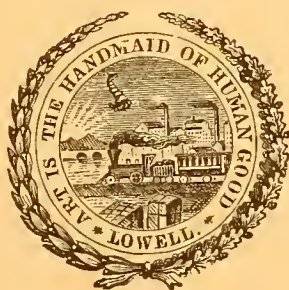
SAMUEL A. McPHETRES,
City Clerk.

TABLE

GIVING THE NUMBER OF BIRTHS, MARRIAGES AND DEATHS IN
LOWELL SINCE ITS INCORPORATION.

| YEAR. | POPULATION. | BIRTHS. | MARRIAGES. | DEATHS. |
|-----------|-------------|------------|------------|---------|
| 1826-1843 | ..... | est. 5,010 | est. 4,500 | 4,186 |
| 1844 | 25,163 | 662 | 319 | 362 |
| 1845 | ..... | 660 | 399 | 363 |
| 1846 | 29,127 | 772 | 591 | 690 |
| 1847 | ..... | 719 | 659 | 949 |
| 1848 | ..... | 796 | 516 | 825 |
| 1849 | ..... | 672 | 320 | 903 |
| 1850 | 33,383 | 966 | 674 | 492 |
| 1851 | ..... | 1,018 | 669 | 629 |
| 1852 | ..... | 1,007 | 669 | 604 |
| 1853 | ..... | 1,093 | 742 | 734 |
| 1854 | ..... | 1,092 | 808 | 834 |
| 1855 | 37,554 | 1,039 | 687 | 766 |
| 1856 | ..... | 1,034 | 632 | 790 |
| 1857 | ..... | 1,051 | 585 | 818 |
| 1858 | ..... | 827 | 467 | 626 |
| 1859 | ..... | 983 | 496 | 739 |
| 1860 | 36,827 | 1,077 | 497 | 720 |
| 1861 | ..... | 949 | 459 | 713 |
| 1862 | ..... | 763 | 368 | 641 |
| 1863 | ..... | 657 | 302 | 695 |
| 1864 | ..... | 658 | 335 | 633 |
| 1865 | 30,990 | 672 | 406 | 575 |
| 1866 | 36,878 | 813 | 625 | 749 |
| 1867 | ..... | 826 | 596 | 640 |
| 1868 | ..... | 860 | 495 | 857 |
| 1869 | ..... | 858 | 575 | 763 |
| 1870 | 40,928 | 926 | 515 | 952 |
| 1871 | ..... | 886 | 647 | 1,033 |
| 1872 | ..... | 1,099 | 670 | 1,048 |
| 1873 | ..... | 1,365 | 705 | 1,161 |
| 1874 | ..... | 1,356 | 580 | 1,184 |
| 1875 | 49,688 | 1,294 | 512 | 1,020 |
| 1876 | ..... | 1,262 | 514 | 1,147 |
| 1877 | ..... | 1,341 | 552 | 1,029 |
| 1878 | ..... | 1,332 | 546 | 1,088 |
| 1879 | ..... | 1,412 | 635 | 1,006 |
| | | 39,807 | 24,263 | 32,964 |

ANNUAL REPORT
OF THE
CHIEF ENGINEER
OF THE
FIRE DEPARTMENT,
OF THE
CITY OF LOWELL,
FOR THE YEAR ENDING MARCH 31, 1880.



LOWELL, MASS. :
Printed by Campbell & Hanscom, Morning Times, 22 Central Street.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, APRIL 13, 1880.

Received and read.

SAMUEL A. McPHETRES, City Clerk.

REPORT.

CHIEF ENGINEER'S OFFICE, }
LOWELL, MARCH 31, 1880. }

To the Honorable the Mayor and City Council:

GENTLEMEN:—I have the honor to submit my annual report of the condition of the Fire Department under my charge; together with such suggestions for your consideration as will, in my opinion, promote more fully the large and growing interests of the city.

The report embraces a detailed statement of the condition of the Department at the close of the year, from personal knowledge and from reports obtained from the several Companies.

I shall endeavor in this report to present to your honorable body all the items of interest connected with the workings of the Department; also a list of the officers and members, with the salaries paid them for their services; the number and location of fire alarm boxes: an inventory of property belonging to the city in charge of the Department, and such other information as may be of interest to your honorable body and the citizens of Lowell; trusting it will enable you to properly

understand the condition, and also to judge of its necessities and of what its needs are to faithfully protect the property of our citizens from the ravages of fire.

MANUAL FORCE AND DISCIPLINE.

The manual force of the Department consists of a Chief Engineer and four (4) Assistant Engineers, ten (10) Drivers, three (3) Steamer Companies consisting of thirty (30) men, five Hose Companies consisting of forty-two (42) members, two (2) Hook and Ladder Companies consisting of twenty-six (26) men, making in all a membership of one hundred and thirteen (113) men. In addition to this, one Hand Hose Carriage located in Pawtucketville carrying 500 ft. of hose run by a Volunteer Company without pay in their locality.

The Chief and ten (10) drivers are permanently employed and in addition to fire duty perform such other labor as may be required of them, as drawing pipe, washing out sewers and taking care of hydrants, etc., one (1) of the drivers is telegraph operator.

The duty of the Department during the past year has not been very arduous, the firemen have not had a great amount of fire duty to perform, but this fact should not make us less vigilant, nor affect the interest of the city government, nor of the citizens in providing means to keep the Fire Department in the best working condition. There is no department in the city that is more essential to have on hand when called, and to keep in full working order than the Fire Department;

the discipline of the Department I can truly say, was never better than it is at the present time; the promptness of our firemen in responding to alarms of fire cannot be surpassed. We sometimes think their services are lightly esteemed and never fully appreciated, when we consider the risk of life and injury to health concerned; this large body of men is sometimes judged harshly, and held by the public as a necessary evil; this fact is evident, and the reason is somewhat clear; the great body—the mass of firemen—suffer from the wrong doing and the vices of a few of their numbers. From a careful investigation it will be found that the firemen, as a body, will average in point of respectability and worth, as producers and artizans, in point of moral character as citizens, and indeed in all the relations of life, equal to any organization of men. In assuming this position, it is not intended to argue that firemen should not be subject to discipline; but, on the contrary, I contend for what is self-evident to every person, that the strictest discipline in the discharge of their duty, and the utmost subordination to superiors should exist; the Fire Department should be drilled to military discipline in the discharge of their duty, and should be holden strictly answerable, by penalty, for the slightest want of obedience to the orders of a superior officer.

This state of discipline however is not more easily brought about by keeping the men down; but it is accomplished by elevating them in the public regard, by raising them to appreciate the necessity of such disci-

pline, by developing a pride and emulation in the prompt discharge of every duty, in energetic and zealous efforts in time of danger, in subordination, and in the cultivation of a capacity to keep cool in time of great excitement; it should be made their pride to be able to think quick and act judiciously in all cases of emergency, and upon a proper impulse of thought and feeling. There are men who are able to give attention to two things at almost the same instant of time: this valuable faculty is acquired, doubtless, by severe discipline of the mind, and in no service are there so many occasions where this kind of ability is required as in that of a fireman; the alarm, the darkness, the bustle, the shriek of terror-stricken women and children, the high wall, the flame enveloped staircase, the explosion of combustibles, the crazed action of the populace, and the gratuitous advice and opinions of those who, at such a time, are not worthy of attention; all these circumstances tend to distract the attention, to disturb the mind, that were otherwise secure; it is at such times that every member of the Fire Department should be able to act coolly and quickly, and also deliberately. The faculty of deliberate and efficient action is very essential; confusion in the public mind, chaos in surrounding circumstances have often produced fatal results; fire has been driven in, instead of out, life has been crushed by falling walls, which might have been secured had a thought been given to their safety, windows and doors are often broken in to feed the flames. Every person will admit these statements to be pain-

fully true after seeing the many and various phases of events as they transpire at different classes of fires; it is not presumed that each and every casualty that might be avoided, can in every instance be prevented, but the assertion is that, by elevated and decided discipline in the Department, the frequency of such casualties will be greatly lessened. The true policy is, that only such men should be approved and admitted members of the Fire Department as are capable of making a proper selection of men for office, men who understand the duties of such office: such men should be well paid for their services; they should take high ground in regard to membership, and see that none but proper persons are admitted to the Department; selections should be made from those best qualified by physical, moral and intellectual abilities to command respect, and be efficient members under the paid system: the men feel the importance of the position, and are actuated by a desire to perform their duty, and to preserve their self respect.

The "rowdy fireman," in this city, has long since become one of the things of the past, and the service has become such as to merit the good opinion of the people. The members of the force of to-day are composed principally of mechanics; hale, rugged men, who in summer's heat or winter's cold leave their workshops or their beds when the alarm summons them, and valiantly battle to subdue man's greatest foe. It is easy for men not familiar with the duty of firemen or of an engineer of the Department, to pleasantly theorize in a

warm office as to how many men can properly run the engines, hose and hook and ladder carriages, and as to how little pay they can be procured for to do the work; but those who have fought and conquered the red flame that painted the sky, and by the sacrifice of time, labor and health, and the endangering of limb and life, have prevented the greedy fires from devouring the city; and those like yourselves, who have watched and governed such men are the only persons who can really have even an idea of what firemen earn, or what a Fire Department needs.

Any and all changes in the Fire Department of this or any other city should be carefully studied and their results well considered; the general sense of security which is in people's minds today and is manifested in various ways, is most desirable, and I think is well founded in fact; so far as it is founded upon the condition of the Fire Department, there seems no reason to think that this confidence in the ability and efficiency of the officers and members of the Department is misplaced.

An inspection of the Fire Department was had Jan. 28, by the Board of Engineers, accompanied by the members of the Committee on Fire Department, and the result was highly satisfactory, revealing a state of efficiency never before equalled in this city, and certainly not excelled by any fire organization in the State; it was demonstrated that it was possible for engines and hose carriages to be on the ground and at work within a very short time after an alarm had been given.

It is almost impossible for fire where there is no inflammable material to make extensive headway. In order to lessen the rates of insurance it is necessary to prevent fires; to do this we must have a thoroughly disciplined and effective Fire Department.

APPARATUS.

There have been added to the department since the last report, three (3) new four-wheeled horse hose carriages, built by the Amoskeag Manufacturing Co., of Manchester, N. H. The carriages were placed in the houses of hose 5, 7 and 8 to take the place of hand carriages; one of the hand hose carriages was transferred to Pawtucketville, also the spare Hook and Ladder truck has been repaired and placed in service. The apparatus now consists of three steam fire engines, of equal capacity; two of them were built by Hunneman & Co., of Boston and one by the Union Machine Co., of Fitchburg, seven (7) four-wheeled horse hose carriages, five (5) built by Amoskeag Manufacturing Co., of Manchester, N. H., one by E. B. Leverich & Co., of New York, and the other one by J. J. Wright & Co., of Lowell, two hand hose carriages built by Hunneman & Co., of Boston, two hook and ladder trucks, one built by Buckley & Merritt, of New York, the other by Juckett & Freeman, of Boston. In addition to this, we have eight hose sleighs, two traverse runner sleighs, four fuel wagons. The sleighs and wagons are used for exercising the horses, telegraph repairs, sewer work, packing and trying hydrants, etc.: also, one heavy

traverse runner sled, and truck, which are used for teaming pipe and other heavy work. It is an important duty on the part of the city to keep the Department equipped to the highest degree of efficiency. The repairs of apparatus when required, become a necessity and are made at once. The apparatus of the Department is now in good condition, and it is my intention and duty to keep it so; repairs to hook and ladder trucks have been made, hose carriages have been repaired and varnished, to repair damage caused by accident, contingencies which are constantly occurring, and require constant watchfulness to provide against and remedy. The wheels and axles of the apparatus are parts most frequently needing repairs, the carrying of such heavy loads at high speed over the rough pavement and railroad tracks, is destructive in the extreme to running gear, the important thing is to have the apparatus reach the fire in serviceable condition, for it is a settled fact that, to prevent serious loss by fire the attack must be made at the outset. In my opinion, Fire Department apparatus requires as much skill to handle successfully, as does the tools of any machine, and possibly more so, for the misuse of fire apparatus must result in great loss of property.

HOSE OF THE DEPARTMENT.

There is now 10,800 feet of leather hose, 10,000 feet of which is in good condition, 800 feet is poor and unreliable for service; 500 feet of rubber and 550 feet of cotton hose is in good condition. 1000 feet of leather

hose have been purchased the past year, which I think will prove very desirable, as it is of excellent quality. 550 feet of cotton hose have been purchased the past year, and it gives the best satisfaction, as it is very easily handled; there have also 500 feet of rubber hose been purchased, in good condition.

The quantity of hose now in the Department is not sufficient, as the quality of a portion of it is not of the first order, owing to the length of time it has been in use. In order to cope with fires successfully it is requisite to have a trustworthy article of hose and plenty of it, for with the pressure of water from the steam engine it is put to a severe test, and is liable to give out at the most critical moment, unless the standard is maintained.

Poor hose neutralizes the value of all efforts of the firemen and their apparatus, however costly and well appointed. What the firemen must have is hose that is reliable and durable. It is of vital importance that our Fire Department be furnished with the best hose that can be obtained, which it is just as essential to have as the steam fire engines, for neither would be of avail without the other. I would therefore, recommend that at least 1500 feet of hose be purchased at as early a moment as possible, for general distribution throughout the Department.

FIRES AND INSURANCE.

The record of the past year in the number of fires and the amount of loss by fire will compare favorably

with any city. During the past year there have been forty-one bell alarms and three still alarms, a decrease of six over the previous year. Perhaps no subject is more constantly before the people than that of the origin of fires and the means to be used for their prevention. With all the modern appliances for the prevention of fires, the fact still remains that there is a steady decrease in their number. Accident is accepted, primarily, as the principal cause of fire; but experience shows that what is called accident is often carelessness. A large part of the destruction of property must be attributed to carelessness, but much of it must be set down to incendiarism. This crime is one of the most difficult of detection in the whole range of offences. The insurance companies are not only justified in inquiring into cases where incendiarism is suspected, but it is their duty to pursue the guilty with all the means in their power. It is so difficult to detect this cowardly crime that, once a clue is obtained, it should be followed unrelentingly, that the community may be rid of the dangerous villains. All the expenses of our Fire Department are raised by taxes laid upon the people, much of which might be saved were all the fires honest in their origin.

PROTECTIVE DEPARTMENT.

The object of the Protective Department is to extinguish incipient fires, to protect property in or near burning buildings, to superintend the removal and take charge of the property so removed, to keep out specta-

tors, many of them for the purpose of plunder. Their first efforts are to locate the fire and if possible extinguish it with a chemical fire extinguisher, and if necessary remove goods or cover them to protect them from damage by water, before the Fire Department begin their work. Every means is used to lessen the cost of fires. Fire Departments oftentimes deliver large quantities of water, which is ruinous to goods and merchandise generally; this I believe to be a wrong principle, as small doses in the right time, in the shape of a chemical extinguisher should in all cases possible be applied. We have many fires, in fact, the majority of fires that occur in dwellings, are among the poorer classes, who cannot afford to lose their little all; and the most of this class of our citizens cannot afford to get their goods insured. At the commencement of the year I recommended to your honorable body for consideration, that the Protective Wagon be added to the Fire Department, since then the Committee on Fire Department have decided to put it into service on the first of May to take the place of Hose Company, No. 6, which meets with my approbation.

CHEMICAL ENGINES.

The experience of Chemical Engines was such that for many years they have been considered of little practical utility. The many improvements, however, which have been made in these engines, and the wonderful success which they are meeting with in all the large

cities and towns, throughout the United States, most certainly commend them as one of the most important adjuncts to a Fire Department.

From personal observations in departments where these engines are used, and the wonderful celerity with which they can be placed in service, I cannot but suggest the advisability of their adoption in this city. I would suggest the advisability of purchasing a double tank engine of the above description, and the placing of the same in the house now occupied by Steamer Company No. 3, on Middle street, in that case I would suggest that Steamer No. 3 be removed to Fourth St. Engine house, Centralville.

FIRE ALARM TELEGRAPH.

This indispensable branch of the Fire Department must of necessity be kept in good condition, to insure its being at all times and under all circumstances perfectly reliable, and its proper care and management is justly regarded as of the first importance.

The advantage of the Fire Alarm can readily be seen and appreciated by property owners, as well as the Fire Department; that prevents turning out the entire Department at every alarm; that part of the Department nearest the box giving the alarm need only attend to it.

With this apparatus there is another important point for consideration, and that is, with it a small number of engines and hose carriages can be made equally as

efficient at the beginning of a fire as a large number after the conflagration has got under full headway. Thus it will be seen that the fire alarm at once puts the whole Fire Department in complete control, and its working subject to the will of its governing officials, while at the same time it puts every citizen in communication with them. During the past year five (5) new Fire Alarm boxes have been added, also Indicators placed in the houses of Hose Co. 7 and 8, and Hook and Ladder Company's No. 1 and 2, also large gong and Indicator in Hose Co. No. 5 house and small gong in Engineer White's house. The above additions require an enlargement of the Battery and I would recommend using the adjoining room. The above is under the management of George B. Whitney and the wisdom for his continuance as Operator cannot be questioned.

HOUSES.

A large amount of money has been spent the past year in building and repairing. One new Engine House in Centralville has been built, alterations have been made in the several houses, Steamer No. 3, Hook and Ladder Co.'s No. 1 and 2, Hose Co.'s No. 4, 7 and 8; there has also been an apparatus placed in each Engine house in the Department worked by a magnet and directly connected with the Telegraph, which at the instant the alarm is sent in opens the horses' stall doors, and in the night time turns up the gas, other arrangements turn down the gas and also shut the street doors after the

apparatus has passed out. Each Engine house is supplied with beds and bath rooms, with the exception of Hose 6 house on Warren street, they are in good condition.

HORSES.

The number of horses, at the commencement of the year, in service and owned by the city was 11, three were disabled and one was lost by sickness, and 8 new ones were purchased giving us at this time 15 horses, two attached to steamer No. 1, two to Steamer No. 2, three to Steamer No. 3, two to Hook and Ladder No. 1, two to Hook and Ladder No. 2, one each to Hose 4, 5, 7 and 8. The horses are all in good condition. I would recommend that when the horses show any signs of disability, they be immediately exchanged for others better able to do the work. It is not expected that horses out of their teens can respond to alarms with as much speed as younger horses. There is no kind of work in which horses are engaged that requires so many good qualities, which are very necessary in horses used in fire departments. Their work comes suddenly upon them, in sunshine or storm, in daylight or darkness; and they must start off with a dash and speed which some horses would rebel against or sink under: for this reason I think that great care should be observed in the purchasing of horses for this Department. Some of our horses have been in use over six years and are good and sound to-day; this must be attributed to the excellent treatment at the hands of the drivers

having them in charge; and it is my aim to give this department my constant attention.

HARNESSES.

The number of harnesses at the commencement of the year in service and owned by the city was five pair of double harnesses and three single harnesses, there have been purchased during the year one pair of double harnesses and two single harnesses, giving us at this time six pair of double harnesses and five single harnesses; with the exception of Hook and Ladder No. 1 they are in good condition.

DRIVERS.

The drivers permanently employed are thoroughly competent and reliable, and the wisdom for the continuance in the service of such employes cannot be questioned.

ENGINEERS.

The several engines are in charge of skilled mechanics, and such repairs as could be made in the houses have been made by the engineers.

HYDRANTS.

Two post hydrants, one on Lyon street and the other on West Pine street, have been changed for flush hydrants. A flush hydrant on Thorndike street has been

changed to Congress street. A 6-inch four-way post hydrant, with independent gates, of Pattee & Perkin's make, has been set at the corner of Grand and Middlesex streets, also a 6-inch post hydrant with four $2\frac{1}{2}$ -inch and one steamer nozzle, of the Chapman Valve Manufacturing Company's make, has been set on Merrimack street at the head of Central street. The old hydrants at these places have been discontinued. Besides these, thirteen post hydrants and three flush hydrants have been set on new extensions, making the whole number of hydrants under my charge 667, and I would recommend that all the old style hydrants on Adams, Branch, Bridge, Cabot, Central, Cushing, Dutton, French, Merrimack, Middle and Middlesex streets and Broadway and Western Avenue, 71 in number, be replaced by new post; because in the old post, the outlet is $2\frac{1}{4}$ inches, $\frac{1}{4}$ of an inch less than the size of our hose; we therefore have to carry a coupling to increase the outlet from $2\frac{1}{4}$ to $2\frac{1}{2}$ inches. In the case of the old flush on the other hand, the outlet is $2\frac{1}{4}$ inches, we have to put on a coupling to increase it to 5 inches, and put on a chuck before we can attach our hose. In addition to these inconveniences, they have to be boxed and packed with wool waste every fall to keep them from freezing; and then in extreme cold weather they will freeze. All those mentioned above are situated in localities where we need the best protection, but have the poorest, in case they are frozen, no protection; in case they are not frozen, we do not get one-half the supply of water that we should from a new post. The

Fire Department is charged \$20 per annum for each hydrant, which amount is placed to the credit of the Water Works.

EXPENDITURES OF THE DEPARTMENT.

The expenses have exceeded the estimates for the year, as will be seen by the table accompanying this report. The expenditures of the year for the whole Department, have amounted to \$65,198.12, which is \$17,198.12 more than the amount appropriated by the City Council. The test which I am the most anxious about is, whether the expenditures have been proper, and the city received an equivalent for the money paid out. It is more difficult to estimate the expenses of the Fire Department than almost any other department in the city, for the reason that we cannot estimate how many alarms of fire we may have, or what our damage to apparatus may be. It is very necessary that the full working force of the department be kept up. Days and weeks may pass, and their services not be required, still it is imperative that the department be "Always Ready." It will be for the interest of the City Council, and the citizens generally, that all proper means be furnished to keep the department up to its present standard. Large sums of money are invested in apparatus and equipments, and in keeping the several houses where they are located, in order. It should be a matter of personal interest, to the tax-payers and the citizens, to visit the several houses, that they may see who

their money is invested, at the same time encourage the members by their presence, and show them that their services are appreciated.

The several houses where permanent men are located, will be open each day (Sunday excepted), from 10 a. m. until 10 p. m.: during these hours visitors will always be welcomed and every courtesy consistent with the service will be shown them.

CONCLUSION.

In concluding this report I would take the occasion to make my acknowledgments to the officers and members of the Department, for their intelligent and hearty support, and the faithful, energetic and willing manner in which they have discharged their respective duties; the permanent employes as well as the other members of the Department have so conducted themselves as to deserve my approbation, and I most cheerfully accord it to them. I deem it my duty, as I feel it a pleasure, to bear testimony to the discipline and efficiency of our force, which is the subject of comment and commendation by our citizens, as well as by many strangers who have had the opportunity of judging thereof. To your honorable body, in this report I have entered into details and made recommendations and suggestions at greater length than is usual, but not beyond what the subject matter demands. I believe in putting the department in order, that when the call comes for duty we shall be prepared for any emergency. To the City

Marshal and members of the police force I tender my sincere thanks for assistance and favors at fires.

Finally, I desire to acknowledge my gratitude to his Honor the Mayor, the Board of Aldermen and Gentlemen of the City Council. I appreciate the kindness and courtesy shown me at all times; and if unremitting diligence and faithful devotion to duty, will manifest my gratitude, and in any degree requite you for this exhibition of your confidence, I promise you that nothing shall be wanting on my part, to faithfully discharge the duties of my office to the best of my ability.

With a lively appreciation of the kind indulgence and hearty support afforded me at all times in the discharge of my official duties and in all my individual capacity,

I am, gentlemen,

Very respectfully,

RUEL F. BRITTON,

Chief Engineer.

| | | | |
|--|----|--------|-------------------|
| Balance undrawn January 1, 1879..... | \$ | 997 | 61 |
| Appropriated and assessed in 1879..... | | 48,000 | 00 |
| | | | <hr/> \$48,997 61 |

RECEIPTS.

| | | | |
|--|-------|----|-------------------|
| Labor teaming pipe, etc..... | \$422 | 85 | |
| Manure and wool waste..... | 169 | 84 | |
| One hose Carriage..... | 150 | 00 | |
| Horse and Harness..... | 112 | 50 | |
| Old Hose, etc..... | 206 | 06 | 1,061 25 |
| | | | <hr/> 50,058 86 |
| Transferred from Corporation Tax Account.. | | | 12,975 93 |
| Transferred from National Bank Account.... | | | 3,558 48 |
| | | | <hr/> \$66,593 27 |

EXPENDITURES.

| | | | |
|---|--------|-------|-------------------|
| Chief and Board of Engineers..... | \$ | 1,775 | 00 |
| Services of Drivers..... | 5,886 | 00 | |
| Services of Firemen..... | 11,095 | 74 | |
| Hay, Grain and Straw..... | 1,243 | 60 | |
| For use of water..... | 13,514 | 28 | |
| Horses..... | 2,005 | 00 | |
| New Harnesses and Repairs..... | 482 | 38 | |
| Medical attendance for Horses..... | 40 | 00 | |
| New Hose Carriages..... | 1,750 | 00 | |
| Repairs on Steamers, Hose Carriages and Sleighs..... | 677 | 07 | |
| Addition, care and supplies to Fire Alarms... | 2,124 | 79 | |
| Gas..... | 306 | 90 | |
| New Hose..... | 1,901 | 60 | |
| Repairs on Hose..... | 28 | 90 | |
| Beds and Bedding..... | 325 | 00 | |
| Labor drawing pipe and washing out sewers.. | 482 | 00 | |
| Rent, Fuel and Coal..... | 329 | 03 | |
| New Engine House and Repairs on others.... | 20,112 | 76 | |
| Appropriation for Roads and Bridges, fuel and labor..... | 576 | 54 | |
| Fireman's Parade..... | 311 | 78 | |
| Incidental expenses..... | 229 | 75 | |
| | | | <hr/> \$65,198 12 |
| Whole expenditure for the year..... | | | |
| Balance undrawn January 1, 1880..... | | | 1,395 15 |
| | | | <hr/> \$66,593 27 |

BOARD OF ENGINEERS

OF THE

CITY OF LOWELL, MASS.

OFFICE, No. 70 MIDDLE STREET, - - ENGINE HOUSE.

RUEL F. BRITTON, *Chief Engineer.*

Age 33, residence 125 Middlesex street, Ward Four. Salary \$1200 per annum.

First Assistant.—* Hiram N. Hall, age 51, residence 84 High Street, Ward 6, occupation salesman. Salary \$150 per annum.

Second Assistant.—Edward S. Hosmer, age 42, residence 12 Livermore Street, Ward 6, occupation provision dealer. Salary \$125 per annum.

Third Assistant.—James F. Norton, age 40, residence 280 Central Street, Ward 3, occupation gas fitter. Salary \$125 per annum.

Fourth Assistant.—Joseph W. White, age 30, residence Third Street, Ward 2, occupation clothing dealer. Salary \$125 per annum.

* Secretary of the Board of Engineers, \$25.

HOPE STEAM FIRE ENGINE CO., No. 1.

11 MEMBERS. HOUSE ON GORHAM ST.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|---------------|------------|------|--------|-------------|----------------|----------|
| J. J. Locke, | Engineer, | 48 | 1 | Machinist, | Walnut Street, | \$175 00 |
| E. C. Kelley, | Assistant, | 29 | 4 | Machinist, | Chapel Street, | 125 00 |
| Geo. Teel, | Driver, | 35 | 7 | Driver, | Engine House, | 730 00 |

HOSE CARRIAGE DRAWN BY TWO HORSES.

| | | | | | | |
|----------------|----------------|----|----|---------------|---------------|----------|
| B. F. Crosby, | Foreman, | 36 | 11 | Plasterer, | 9 Andrews St. | \$110 00 |
| J. Cowell, | Ass't Foreman, | 33 | 13 | Teamster, | 23 Kidder St. | 100 00 |
| Geo. Hustwick, | Clerk, | 41 | 16 | Gas Fitter, | 1 Carter St. | 110 00 |
| W. H. Grady, | Hoseman, | 25 | 15 | Plasterer, | Engine House, | 100 00 |
| O. J. Gilbert, | " | 30 | 19 | Clerk, | 19 Elm St. | 100 00 |
| G. W. Lovett, | " | 29 | 17 | Manufacturer, | Engine House, | 100 00 |
| E. Gerry, | " | 22 | 10 | Clerk, | 8 Favor St. | 100 00 |
| C. D. Foley, | " | 25 | 12 | Carpenter, | Newhall St. | 100 00 |

Apparatus and property owned by the city, in care of company.

One steamer built by Union Machine Co., of Fitchburg, Mass., in 1872 : has two double acting steam cylinders, $7\frac{1}{8}$ in. in diam., 8 in. stroke, 2 double-acting pumps, $4\frac{3}{8}$ in. in diam., arranged to work separately or together ; weight when loaded, 7,575 lbs. One horse hose carriage built by the Amoskeag Locomotive Works, carrying 900 ft. of hose ; 1 two-way chuck ; 1 branch connection ; two hose pipes with stop nozzles ; 1800 ft. $2\frac{1}{2}$ in. leather hose ; 40 ft. $3\frac{1}{4}$ in. rubber hose ; 1 $2\frac{1}{2}$ in. brass cap ; $5 \times 2\frac{1}{2}$ reducer ; 4 small reducers ; 12 spanners ; 7 lanterns ; 3 wrenches ; 6 ladder straps ; 5 iron bars ; 2 axes ; 2 wrenches ; 1 bucket, 1 hose sleigh ; 1 two horse fuel wagon ; 1 pr. lead bars ; 1 pair horses ; 2 set double harnesses ; 1 pair horse blankets ; 1 pair hoods ; 1 set blocks and tackle ; 2 beds and bedding ; 1 mirror ; 2 bureaus ; 14 cane seat chairs ; 1 desk ; 1 indicator ; 1 large gong ; 3 shovels ; 2 forks ; 3 brooms ; 1 30 ft. rope ; 1 pail ; 2 ladders ; 1 steam boiler ; 1 coal hod ; 1 iron ash pan ; 1 clock ; 1 jack screw ; 1 work bench and vice ; 4 spittoons ; 1 chisel ; 2 sets shafts, 1 mat ; 3 oil cans, tools necessary for cleaning horses, 11 silver badges and 1 clock.

TORRENT STEAM FIRE ENGINE CO., No. 2.

11 MEMBERS. HOUSE ON BRANCH ST.

| Name. | Rank. | Age. | Badge. | Oeeupation. | Residence. | Salary. |
|-------------------|-----------------|------|--------|-------------|---------------|----------|
| Geo. Maddocks, | Engineer, | 34 | 2 | Maehinist, | Engine House. | \$175 00 |
| Chas. S. Hibbert, | Ass't Engineer, | 34 | 5 | Maehinist, | 39 Branch St. | 125 00 |
| Henry Boynton, | Driver, | 28 | 8 | Driver, | Engine House, | 730 00 |

HOSE CARRIAGE DRAWN BY TWO HORSES.

| | | | | | | |
|------------------|----------------|----|----|----------------|-----------------|----------|
| A. C. Stearns, | Foreman, | 39 | 20 | Cabinet Maker, | 6 Branch St. | \$110 00 |
| John Abbott, | Ass't Foreman, | 30 | 21 | Carpenter, | Appleton St. | 100 00 |
| Frank Akers, | Clerk, | 22 | 22 | Machinist, | Engine House, | 110 00 |
| Joseph Hill, | Hoseman, | 30 | 26 | Plumber, | West Court, | 100 00 |
| M. J. Burns, | " | 25 | 23 | Carpenter, | Engine House. | 100 00 |
| Geo. A. Bennett, | " | 40 | 24 | Roofer, | 39 Marshall St. | 100 00 |
| S. Bartlett, | " | 31 | 25 | Clerk, | 22 Queen St. | 100 00 |
| C. W. Marriott, | " | 43 | 27 | Carpenter, | 1 Manahan St. | 100 00 |

Apparatus and property owned by the city, in care of company.

Steamer built by Hunneman & Co., weight when loaded, 7720 lbs. Hose carriage by Leverich & Co., of New York; 700 ft. hose; 1150 ft. 2½ in. leather hose; 550 ft. 2½ in. cotton hose; 1 hose sleigh; 1 fuel wagon; 1 pair horses; 2 set double harnesses; 2 pair blankets; 1 two-way chuck and reducer; 1 branch connection; 2 hose pipes stop nozzles; 6 spanners; 6 ladder straps; 2 hydrant wrenches; 2 axes; 2 bars; 1 copper gooseneck; 1 jack screw; 1 pair lead bars; 6 coal boxes; 1 wagon jack; 11 arm chairs; 12 cane seat chairs; 1 stove; 1 copper boiler; 3 mirrors; 2 bureaus; 3 beds and bedding; 1 gong; 1 indicator; 1 steam boiler; 11 silver badges; 1 clock; all tools necessary for cleaning horses and repairing steamer and hydrants, and 1 work bench and vice.

WAMESIT STEAM FIRE ENGINE CO., No. 3.

12 MEMBERS. HOUSE ON MIDDLE ST.

| Name. | Rank. | Age. | Bad ge. | Occupation. | Residence. | Salary. |
|-----------------|-----------------|------|---------|-----------------|----------------|----------|
| E. L. Brown, | Engineer, | 40 | 3 | Machinist, | 20 Mer'k Corp. | \$175 00 |
| J. P. Merchant, | Ass't Engineer. | 41 | 6 | Engineer, | Westford St. | 125 00 |
| G. B. Whitney, | Driver, | 32 | 9 | Driver S. F. E. | Engine House. | 730 00 |

HOSE CARRIAGE DRAWN BY ONE HORSE.

| | | | | | | |
|------------------|----------------|----|----|----------------|------------------|--------|
| J. H. Stackpole, | Foreman, | 38 | 31 | Manufacturer, | 27 Stackpole St. | 110 00 |
| A. B. Smith, | Ass't Foreman, | 28 | 32 | Machinist, | L. M. S. Corp. | 100 00 |
| J. W. Halstead, | Clerk, | 31 | 36 | Manufacturer, | Engine House. | 110 00 |
| E. J. Little, | Driver, | 31 | 39 | Driver H. Hose | " " | 730 00 |
| F. Bowdoin, | Hoseman, | 28 | 37 | Manufacturer, | 19 Stackpole St. | 100 00 |
| F. Hoyt, | " | 31 | 33 | Cigar Maker, | Engine House. | 100 00 |
| D. W. Willard, | " | 29 | 35 | Carpenter, | " " | 100 00 |
| F. Roark. | " | 30 | 34 | Manufacturer, | 82 Middle St. | 100 00 |
| F. B. Clemence. | " | 26 | 38 | Carpenter, | 120 Appleton St | 100 00 |

Apparatus and property owned by the city, in care of company.

Steamer built by Hunneman & Co., 1856, similar to 1 and 2, weight when loaded 7650 lbs.; 30 ft. suction hose with hydrant couplings; 1 horse hose carriage for shafts or pole; 500 ft. 2½ in. rubber hose. 1 hose sleigh with shafts; 1 whiffletree; 3 horses; 1 pair double harnesses; 1 single harness; 6 halter bridles; 4 horse blankets; 3 hoods; 1250 ft 2½ in. leather hose; 1 two-way chuck and reducer; 2 reducers; 2 caps; 2 hose pipes; 2 stop nozzles; 2 branch connections; 2 hydrant wrenches; 12 spanners; 2 bars; 2 shovels; 3 ladder straps; 1 bucket; 12 silver badges; 6 lanterns; 4 beds and bedding; 1 bureau; 3 mirrors; 1 clock; 13 chairs; 1 hose rope; 1 window brush; 1 jack screw; 1 ½ in. brass cap; 1 monkey wrench; 1 indicator; 1 gong; all tools necessary for cleaning horses and hydrant work and 1 carriage jack.

MAZEPPA HOSE CO., No. 4.

9 MEMBERS. HOUSE ON FAYETTE ST.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|-----------------|----------------|------|--------|--------------|----------------|----------|
| Wm. King, | Foreman, | 37 | 40 | Boot Maker, | 56 Fayette St. | \$110 00 |
| W. H. Halstead, | Ass't Foreman, | 35 | 41 | Wool Sorter, | 2 High Street, | 100 00 |
| Ed. Meredith, | Clerk, | 38 | 42 | Painter, | 54 Fayette St. | 110 00 |

HOSE CARRIAGE DRAWN BY ONE HORSE.

| | | | | | | |
|----------------|----------|----|----|-------------|-----------------|----------|
| J. Harrington, | Driver, | 29 | 48 | Driver, | Hose House, | \$730 00 |
| Chas. Morse, | Hoseman, | 38 | 44 | Finisher, | 59 Howe St. | 100 00 |
| Ed. Meloy, | " | 33 | 45 | Gas Fitter, | 54 Church St. | 100 00 |
| J. J. Quinlan, | " | 27 | 46 | Machinist, | 6 Fayette St. | 100 00 |
| Geo. Wyman, | " | 28 | 47 | Mason, | 24 Bartlett St. | 100 00 |
| Joseph King, | " | 25 | 43 | Lather, | Chestnut St. | 100 00 |

Apparatus and property owned by the city, in care of Company.

Horse hose carriage, built by J. J. Wright of Lowell, carrying 600 ft. of hose; 1300 ft. of $2\frac{1}{2}$ in. leather hose; 1 two-way chuck; 2 hydrant wrenches; 3 hose pipes; 20 ft. $\frac{3}{4}$ in. rubber hose; 9 silver badges; 12 hat fronts; 8 spanners: 1 branch connection; 4 reducing couplings; 1 $2\frac{1}{2}$ in. brass cap; 2 bars; 2 axes; 1 monkey wrench; 1 whiffletree; 8 ladder straps; 4 lanterns; 1 carriage jack; 1 clock; 2 mirrors; 1 stove; 1 table; 1 flag; 1 ladder; 1 boiler; 19 chairs; 1 hod; 1 shovel; 2 water pails; 1 duster; 1 S wrench; 5 spittoons; 1 map, 1 hose sleigh; 1 bed and bedding; 1 bureau; 1 horse; 1 harness; 2 blankets; brooms and tools for cleaning horse and 1 fuel wagon.

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WELLMAN HOSE CO., No. 5.

9 MEMBERS. HOUSE ON FOURTH ST., CENTRALVILLE.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|---------------|----------------|-------|--------|-------------|---------------|----------|
| G. W. Patten, | Foreman, | 37 | 51 | Florist, | 13 Fourth St, | \$110 00 |
| ..... | Ass't Foreman, | ..... | ..... | ..... | ..... | ..... |
| A. E. Kidder, | Clerk, | 24 | 59 | Blacksmith, | Hose House. | 110 00 |

CARRIAGE DRAWN BY ONE HORSE.

| | | | | | | |
|------------------|----------|----|----|-----------|-----------------|----------|
| T. J. Farrell, | Driver, | 28 | 50 | Driver, | Hose House, | \$730 00 |
| C. Rogers, | Hoseman, | 46 | 52 | Grocer, | 11 Fifth St. | 100 00 |
| F. Mansur, | " | 30 | 56 | Gardener, | 11 Fourth St. | 100 00 |
| G. H. McMonagle, | " | 27 | 58 | Moulder, | 38 Hampshire St | 100 00 |
| B. Callahan, | " | 32 | 54 | Laborer, | 38 River St. | 100 00 |
| H. E. Hovey, | " | 25 | 57 | Mason, | 28 W. Fifth, | 100 00 |
| E. Boyle, | " | 26 | 55 | Truckman, | 46 River St. | 100 00 |

Apparatus and property owned by the city, in care of company.

One horse hose carriage built by Amoskeag Co., Manchester, N. H. ; 1 horse ; 1 harness ; 2 bridles ; 1 gong ; 1 indicator ; 1450 ft. 2½ in. leather hose ; 50 ft ¾ in. rubber hose ; 2 hose pipes ; 1 spray ; 1 reducer ; 1 stove ; 1 furnace ; 1 wooden pail ; 16 chairs ; 2 beds and bedding ; 1 reducing coupling ; 1 cap ; 8 spanners ; 2 wrenches ; 6 lanterns ; 2 bars ; 1 ladder ; 1 axe ; 1 jack ; 3 shovels ; 1 hod and shovel ; 3 brooms ; 2 forks ; 1 clock ; 1 duster ; 1 sifter ; 1 hose sleigh ; 3 spittoons ; 1 pair steps ; 1 two-way chuck ; 1 connection ; 1 oil can ; 1 table ; 140 ft. ¾ in. hose ; 1 iron pulley ; 10 badges ; tools for cleaning horse and 1 horse blanket.

OCEAN HOSE CO., No. 6.

10 MEMBERS. HOUSE ON WARREN ST.

| Name. | Rank. | Age. | Badge. | Oecupation. | Residence. | Salary. |
|----------------|----------------|------|--------|---------------|-----------------|----------|
| A. C. Walton, | Foreman, | 41 | 60 | Manufacturer, | 48 Mass. Corp. | \$110 00 |
| H. Coulam, | Ass't Foreman, | 26 | 61 | Manufacturer, | 47 Charles St. | 100 00 |
| W. P. Wiley, | Clerk, | 26 | 62 | Bleacher, | 96 Mer'k St. | 110 00 |
| D. Cochran, | Steward, | 26 | 66 | Manufaeturer, | 16 Market St. | 140 00 |
| B. F. Hanson, | Hoseman, | 37 | 64 | Truckman, | 41 Rock St. | 100 00 |
| J. B. Varnum, | " | 26 | 67 | Moulder, | 94 Appleton St. | 100 00 |
| J. H. Pearson, | " | 27 | 68 | Manufaeturer, | 77 Charles St. | 100 00 |
| J. S. Hanson, | " | 42 | 63 | Expressman, | 8 Marshall St. | 100 00 |
| F. McFarland, | " | 24 | 65 | Clerk, | 170 Mer'k St. | 100 00 |
| W. F. Kimball, | " | 23 | 69 | Clerk, | 69 Summer St. | 100 00 |

HAND HOSE CARRIAGE DRAWN BY HAND.

Apparatus and property owned by the city, in care of company.

One hose carriage ; 1000 ft. of $2\frac{1}{2}$ in. leather hose ; 20 ft. of $\frac{3}{4}$ in. hose ; 5 reducing couplings ; 8 spanners ; 1 two-way chuck ; 1 brass cap ; 2 hose pipes ; 3 ladder straps ; 2 wrenches ; 1 hose sleigh ; 6 lanterns ; 2 stoves ; 2 coal hods ; 1 broom ; 1 brush ; 1 carriage jack ; 3 spittoons ; 1 duster ; 1 mirror ; 1 boiler ; 3 buckets ; 2 axes ; 20 chairs ; dustpan and brush ; 1 gong and 10 silver badges.

MECHANICS HOSE CO., No. 7.

9 MEMBERS. HOUSE ON CROSS ST.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|-----------------|----------------|------|--------|-------------|----------------|----------|
| J. H. Tucker, | Foreman, | 27 | 74 | Moulder, | South St. | \$110 00 |
| E. W. Fletcher, | Ass't Foreman, | 26 | 77 | " | L. M. S. Corp. | 100 00 |
| J. E. Firth, | Clerk, | 25 | 90 | Blacksmith, | 90 Rock St. | 110 00 |

CARRIAGE DRAWN BY ONE HORSE.

| | | | | | | |
|------------------|----------|----|----|---------------|------------------|---------|
| J. A. Pierce, | Driver, | 30 | 70 | Driver, | Hose House, | \$73 00 |
| S. O. Wade, | Hoseman, | 27 | 73 | Stone Cutter, | 24 Perrin St. | 100 00 |
| J. H. Maxfield, | " | 26 | 76 | Wood Turner, | Fletcher St. | 100 00 |
| W. H. Estabrook, | " | 33 | 79 | Mason, | 90 Race St. | 100 00 |
| J. H. Joyce, | " | 37 | 71 | Moulder, | 42 Butterfld St. | 100 00 |
| D. J. Hurley, | " | 28 | 72 | Stone Cutter, | Hose House, | 100 00 |

Apparatus and property owned by the city, in care of company.

One horse hose carriage built by Amoskeag Manufacturing Co., Manchester, N. H. ; 1 sleigh ; 1 harness ; 1 blanket ; 1 hood ; 1100 ft. leather hose ; 2 pipes ; 9 badges, 12 hat fronts ; 6 spanners ; 1 chuck and reducer ; 2 small reducers ; 2 bars ; 2 brooms ; 1 jack ; 1 pail ; 6 belts, 1 hod ; 1 connection with cap, 4 straps ; 1 duster ; 1 ladder ; 2 brushes ; 7 lanterns ; 4 spittoons ; 1 stove, 3 shovels, 6 chairs, 2 beds and bedding, 1 indicator, 1 gong, 1 wagon, 2 axes, and all tools for cleaning horse.

EXCELSIOR HOSE CO., No. 8.

9 MEMBERS. HOUSE ON CENTRAL STREET.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|-----------------|----------------|------|--------|-------------|----------------|----------|
| Ed. Cunningham. | Foreman, | 32 | 83 | Gas Fitter, | 29 Charles St. | \$110 00 |
| R. O'Connell, | Ass't Foreman. | 24 | 87 | Tin Smith, | 224 Gorham St. | 100 00 |
| J. E. Coughlin, | Clerk, | 29 | 82 | Plasterer, | 243 Gorham St. | 110 00 |

CARRIAGE DRAWN BY ONE HORSE.

| | | | | | | |
|------------------|----------|----|----|----------------|-----------------|----------|
| Wm. H. Meloy, | Driver, | 34 | 80 | Driver, | Hose House, | \$730 00 |
| Joseph Mack, | Hoseman, | 31 | 81 | Gas Fitter, | 40 Chapel St. | 100 00 |
| J. Ward, | " | 27 | 93 | Manufaeturer, | 228 Central St, | 100 00 |
| P. Curtin, | " | 27 | 88 | Moulder, | 8 Kingston St. | 100 00 |
| R. Barris, | " | 27 | 86 | Harness Mak'r. | 374 Central St. | 100 00 |
| E. J. O'Connell, | " | 23 | 92 | Copper Smith, | 224 Gorham St. | 100 00 |

Apparatus and property owned by the city, in care of company.

One horse hose carriage, 1 sleigh, 1 horse, 1 harness, 1 bridle blanket, 2 forks, 2 brooms, 2 beds and bedding, 1 indicator, 1 gong, 1250 feet leather hose, 2 pipes, 6 lanterns, 1 axe, 1 two-way chuck, 1 reducer, 2 hydrant wrenches, 1 brass cap, 1 bar, 5 spanners, 5 ladder straps, 1 connection, 20 chairs, 4 spittoons, 1 stove, 1 mirror, 1 coal hod, 1 jack, 25 feet of $\frac{3}{4}$ in. hose, 1 clock, 1 copper boiler, 1 step ladder, 1 ash can, 1 carriage pole, tools for cleaning horses, 9 silver badges.

FRANKLIN HOOK AND LADDER COMPANY, No. 1.

16 MEMBERS. HOUSE ON MIDDLE STREET.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|-----------------|----------------|------|--------|-------------|--------------------|----------|
| H. B. Downs, | Foreman, | 45 | 102 | Carpenter, | 47 Hamilton Corp. | \$110.00 |
| F. E. Fuller, | Ass't Foreman, | 31 | 105 | Carpenter, | 42 Hamilton Corp. | 100.00 |
| A. H. Gilbert, | Clerk, | 30 | 103 | Moulder, | 13 Dutton st., | 110.00 |
| N. Bishops, | | 41 | 120 | Spinner, | 120 Law'nce Corp. | 100.00 |
| W. L. Peabody, | Driver, | 31 | 100 | Driver, | H. and L. House, | 730.00 |
| H. S. Gardner, | L. Man, | 28 | 108 | Moulder, | 25 Worthen st., | 100.00 |
| J. P. Pearson, | " | 41 | 101 | Carpenter, | 83 Church st., | 100.00 |
| H. C. Daggett, | " | 54 | 113 | Carpenter, | 6 Prescott Corp., | 100.00 |
| Geo. Sargent, | " | 26 | 107 | Carpenter, | 16 7th st., | 100.00 |
| J. A. Pullen, | " | 51 | 114 | Machinist, | 161 Merrim'k Corp. | 100.00 |
| W. N. Smith, | " | 27 | 13 | Painter, | 172 Merrimack st., | 100.00 |
| J. C. Jones, | " | 37 | 111 | Carpenter, | 29 5th st., | 100.00 |
| R. McCullough, | " | 30 | 99 | Carpenter, | 56 Middle st., | 100.00 |
| J. D. Cloudman, | " | 24 | 106 | Machinist, | H. and L. House, | 100.00 |
| Geo. Farnham, | " | 30 | 119 | Machinist, | H. and L. House, | 100.00 |
| C. M. Brooks, | " | 29 | 118 | Machinist, | 29 Merrim'k Corp., | 100.00 |

Apparatus and property owned by city, in care of company.

Hook and ladder truck, with tiller, built by Buckley & Merritt, New York, 1 Bangor ladder, 65 feet, 1 forty-foot, 1 thirty-six foot, 1 twenty-five foot, 1 twenty-foot, 2 thirty feet each, 2 roof ladders, fifteen and twenty-five feet, 1 twelve-foot ladder, 4 forks, 4 axes, 4 buckets, 4 lanterns, 4 brooms, 2 scrapers, 2 shovels, 1 bunter, 1 bar, 1 respirator, 1 wrench, 11 chairs, 2 brooms, 1 mirror, 200 feet rope, 3 hand fire extinguishers, 1 indicator, 2 horses, 2 harnesses, 2 blankets, tools for cleaning horses, 16 silver badges, 6 rubber covers, 10 hooks, 1 fuel wagon, 1 traverse runner sleigh, 20 feet $\frac{3}{4}$ inch rubber hose.

GEORGE HOBSON HOOK AND LADDER COMPANY, No. 2.

11 MEMBERS. HOUSE ON MIDDLE STREET.

| Name. | Rank. | Age. | Badge. | Occupation. | Residence. | Salary. |
|-----------------|----------------|------|--------|-------------|---------------------|----------|
| T. R. Garity, | Foreman, | 41 | 125 | Plumber, | 16 Bowers street, | \$110.00 |
| C. F. Hemenway, | Ass't Foreman, | 30 | 109 | Carpenter, | 234 Central street. | 100.00 |
| W. A. Charters, | Clerk, | 29 | 78 | Belt Maker, | 73 Worthen street. | 110.00 |
| H. J. Foster, | Driver. | 29 | 123 | Driver. | H. and L. House, | 730.00 |
| T. Allen, | L. Man, | 24 | 29 | Gas Fitter, | 21 Chapel street, | 100.00 |
| H. W. Burton, | " | 38 | 124 | Carpenter, | 16 Walker street. | 100.00 |
| J. L. Flagg, | " | 44 | 112 | Carpenter, | 38 Hamilton Corp. | 100.00 |
| C. A. Lord, | " | 35 | 121 | Bricklayer, | H. and L. House, | 100.00 |
| D. Pickman, | " | 55 | 115 | Machinist, | 52 Pleasant street. | 100.00 |
| Wm. Roberts, | " | 52 | 116 | Expressm'n | 27 Hildreth street. | 100.00 |
| Jas. Winslow, | " | 26 | 122 | Dyer, | H and L. House, | 100.00 |

Apparatus and property owned by city, in care of company.

Hook and ladder truck, built by Juckett & Freeman: 1 Butt ladder, 28 feet long; 1 splicer, 14 feet; 3 ladders, each thirty-four feet long; 1 roof ladder, twenty-four feet long; 1 roof ladder, twenty-four feet long; 1 roof ladder, twenty-feet long; 1 ladder, 18 feet long; 1 ladder, ten feet long; 5 brooms; 2 scrapers; 3 hand fire extinguishers; 4 rubber blankets, 12 by 18; 3 rubber covers, 9 by 12; 2 axes; 6 props; 3 hooks; 2 shovels; 200 feet rope; 2 forks; 3 rakes; 3 lanterns; 2 pails; 1 Johnson pump; 6 extinguishing charges; 1 bar; 1 sledge; 15 chairs; 1 mirror; 1 clock; 1 duster; 1 water pot; 50 feet $\frac{3}{4}$ inch hose; 3 beds and bedding; 1 gong; 1 indicator; 2 horses; 2 harnesses; 2 blankets; 2 bridles; all tools necessary for cleaning horses; 11 badges.

ADDITIONAL FIRE APPARATUS.

Warren Street Engine House—One two-wheeled horse hose carriage; one salvage wagon.

Lincoln Street Engine House—One four-wheeled hand-hose carriage.

FIRES AND ALARMS

FROM APRIL 1, 1879, TO MARCH 31, 1880.

1879.

- April 12. 8.35 p. m., box 71, Middlesex Village, 1-story wooden house, unoccupied, loss, \$75, cause incendiary, department in service.
- .. 13. 3.40 a. m., box 12, 3-story brick building on Central street, owned by the Mason heirs, loss \$640, insurance paid \$640; occupied by J. W. White, clothing dealer, loss \$136, ins. \$1600, ins. paid \$136; W. W. Morse & Son, clothing dealers, loss \$4500, ins. \$5000, ins. paid, \$4500; W. W. Boutwell, jeweller, loss, \$1000, ins. \$1500, ins. paid, \$1000; D. S. Jones, billiard room, loss \$34, ins. 400, ins. paid, \$34; cause unknown, department in service.
- .. 22. 10.15 p. m., box 71, the remaining of April 12th fire, cause incendiary.
- May 7. 6.15 a. m., a still alarm on Middle street, extinguished by members of Steamer No. 3. and H. and L. No. 1; cause, defective chimney.
- .. 8. 4.30 p. m., box 25, two-story wooden dwelling on Tremont street, owned by A. C. Wheelock and occupied by French families, loss \$10, no insurance.
- .. 15. 12.45 a. m., a still alarm, wooden block on Middlesex street, extinguished by the Chief Engineer and Torrent Co. No. 2, cause sparks from the chimney.
- June 19. 7.15 p. m., box 5, wooden building on Thorndike street, owned by W. W. Morse, loss \$200, ins. \$700, ins. paid, \$200; occupied by J. M. McNally, loom harness maker, loss \$240, ins. \$175, ins. paid \$175; Foy & Murphy, grain dealers, loss \$90, ins. \$100, ins. paid, \$90; C. E. Shorey, coal dealer, no loss; cause, spontaneous combustion, department in service.
- .. 22. 5.55 p. m., box 3, Mt. Vernon Chapel, wooden building, corner Mt. Vernon and Butterfield street, cause, struck by lightning, loss \$10, insurance paid \$10.
- July 5. 1.45 a. m., box 16, 2½-story wooden dwelling, on Lawrence street, owned by A. C. Wheelock, loss \$362.50, ins. paid, \$362.50; cause unknown, department in service.
-

Note.—A "Still Alarm" is given by notice to an engineer or some member of the Fire Department, who in many cases can control an incipient fire without an alarm from a box.

- July 17. 3 p. m., box 9, Dempsey Court, rear of Salem street, straw bed, extinguished by the occupants, no loss, cause, unknown.
- “ 21. 3 a. m., box 53, burning chimney on Jackson street, no necessity for giving an alarm.
- Aug. 3. 10.25 a. m., box 21, 2½-story brick dwelling house on Kirk street, owned by Dr. Pillsbury, loss \$458.62, ins. \$500, ins. paid \$458.62; occupied by Mrs. Gage, loss \$50, cause, spontaneous combustion, department in service.
- “ 4. 11.10 a. m. box 24, unoccupied wooden dwelling on Winter street, no loss, cause incendiary, extinguished by the Chief Engineer and Driver of H. and L. No. 1.
- “ 12. 7.30 a. m., box 25, brick building on Colburn street, owned by the Merrimack Manufacturing Co., loss \$300, ins. paid, \$300; occupied by T. Mahoney, loss \$50, extinguished by the Corporation Department, cause unknown.
- “ 24. 9.10 a. m., box 21, slight fire in a roof on a wooden dwelling house on Gorham street, insured, no loss, cause, spark from chimney.
- “ 24. 9.10 p. m., box 21, stone building on Merrimack street, occupied by W. F. Pearson, candy store, loss \$58, ins. \$500, ins. paid, \$58; F. G. Mitchell's ladies' furnishing goods, loss \$600, ins. \$5000, ins. paid, \$600, department in service, cause unknown.
- “ 27. 5.30, a. m., box 9, test alarm, trial of different calls.
- Sept. 24. 7 p. m., box 53, steam issuing from Hill Bros. carriage works, no necessity for giving an alarm.
- Oct. 1. 10.55 a. m., box 25, explosion of can of kerosene oil in wooden block on Suffolk street, insured, no loss.
- “ 4. 1 p. m., box 45, 1½-story dwelling house on Branch street, owned by S. J. Freeman, loss \$50, no insurance, department in service, cause unknown.
- “ 29. 9.10 a. m., box 46, chimney on Front street burning out, no necessity for giving an alarm.
- Nov. 1. 10.45, a. m., box 5, wooden dwelling, No. 27 Cushing street, owned by B. F. Cleworth, loss \$191.36, ins. \$950, ins. paid, \$191.36; occupied by Mrs. Geo. Dobbins, loss \$30, cause, over heated stove, department in service.
- “ 7. 3 p. m., box 28, slight fire in laundry on Cabot street, no necessity for giving an alarm, insured, no loss, cause, spark from the chimney.
- “ 7. 4.10 p. m., box 45, corner of Howard and Middlesex streets, hot coal ashes in a barrel, no necessity for giving an alarm, insured, no loss.
- “ 27. 7.30 p. m., box 81, fire out of the city, no necessity for giving an alarm.
- “ 29. 4.30 p. m., box 6, burning out a chimney in a two-story house on Cross street, insured, no loss.

- Nov. 29. 5.50 p. m., box 46, burning out a chimney in a two-story house on Front street, insured, no loss.
- Dec. 14. 7.40 p. m., box 17, 1-story wooden smoke house, rear of Middlesex street, owned by C. H. Wilder, loss \$125, occupied by Hunt & Wilder, loss \$493, ins. \$500, ins. paid, \$493; cause, overheated furnace, department in service.
- .. 18. 10.15 p. m., box 24, 1½-story ell to a brick building on Spring street, owned by Richardson heirs, loss \$150; occupied by C. E. Shorey, grocer, loss \$100, ins. paid, \$100.
- .. 23. 3.15 p. m., box 32, fire in Draent, out of the city, assistance sent.
- .. 29. 10.50 p. m., box 25, 2½ story wooden building owned and occupied by R. S. Hight, loss, building and stock, \$1000, ins. \$2500, 1880, ins. paid \$1000; cause, defective chimney, department in service.
- Jan. 5. 10.30 p. m., box 25, smoke issuing from wooden dwelling on Dodge street, no necessity for giving an alarm.
- .. 9. 11.15 p. m., box 53, in Hamilton Manufacturing Co. yard, extinguished by the Company's employes.
- .. 14. 8.15 p. m., box 46, barn in the rear of River street, Barney McNabb, loss \$2.00, cause unknown.
- .. 14. 4.10 p. m., box 32, 2½-story wooden dwelling on Bridge street, owned by S. B. Puffer, loss \$1000, ins. \$2500, ins. paid \$1000; occupied, by Mrs. Jane Read, loss \$65, extinguished with chemical extinguisher, cause, defective chimney.
- * 15. 8.30 p. m., box 27, fire out of the city, no necessity for giving an alarm.
- .. 19. 7.40 a. m., box 72, fire at the State Alms House, a call for assistance, 1 steamer and 2 hose companies sent.
- .. 22. 4.30 p. m., box 7, 2½-story brick house on Merrimack street, owned by Mrs. Doyle, loss \$30, ins. \$3000, ins. paid, \$30; occupied by Mrs. M. A. Smith, loss \$30, cause, defective chimney.
- Feb. 2. 9.30 a. m., box 19, burning out a chimney in a 2½-story wooden house on Gorham street, insured, no loss.
- .. 2. 10.15 a. m., box 3, 2½-story wooden house on the corner of Fletcher street and Broadway, owned by H. G. Sturvesant, loss \$295, ins. \$2500, ins. paid, \$295; occupied by B. J. Bachelder, loss \$300; by Z. Sturvesant, loss \$150, ins. \$150, ins. paid, \$150; cause, defective chimney, department in service.
- .. 9. 10.30 p. m., box 51, wooden building, owned and occupied by F. H. Parker, coal office, loss \$190, ins. \$265, ins. paid, \$190; caused by over heated stove, department in service.
- March 2. 6.30 p. m., box 5 and 42, wooden building on Western avenue, owned by W. W. Morse, loss \$1100, ins. \$8000, ins. paid, \$1100; occupied by A. Rollason, loss \$5120, ins. \$6500, ins. paid, \$5120; cause, spontaneous combustion, department in service.

- Mar. 16. 5.45 p. m., wooden building on William street, owned by Anstin C. Molloy. loss \$4.93. ins. \$2000. ins. paid, \$4.93, extinguished by Engineer White and members of Hope No. 1 and H. and L. No. 2; cause. sparks from chimney.
- .. 20. 5.45 p. m., box 25, 2½-story wooden building, on Merrimack street, owned by P. P. Bradt. loss \$155. ins. paid. \$155; occupied by French families. cause, from the chimney, department in service.
- .. 22. 9.10 a. m., box 42, 2½-story wooden block on Middlesex street, owned by H. Morrison, unoccupied, loss \$82. ins. \$3500. ins. paid, \$82, cause, incendiary, department in service.
- .. 24. 6.15 p. m., box 61, burning out a chimney in a two-story house on Newhall street, insured, no loss.
-

The number of alarms from signal boxes, for the year ending March 31, 1880, was 41 bell, and 3 still alarms, making in all 44; decrease of six from last year. Of the alarms given, the services of the department were called into requisition at twenty-two of them. The amount of loss was \$19,065.48, upon which there has been paid insurance to the amount of \$17,563.48, making the loss above insurance, \$1,502.00, making a decrease from last year of \$48,938.45.

FIRE ALARM TELEGRAPH.

Automatic Repeater, with Battery. Location, Engine House, Middle st.

GEORGE B. WHITNEY, Operator. Salary \$300.

Twenty-five miles of wire on poles and buildings.

Forty-three signal boxes.

Four large gongs in circuit.

Seven small gongs in circuit.

Seven strikers.

The four large gongs are in the houses of Companies Nos. 1, 2, 3, and 5, and five of the small ones are in the houses of Companies Nos. 4, 6, 7 and 8, and Hook and Ladder, No. 2. There is also one at the Chief's house and one in Assistant Engineer Hosmer's house.

The strikers are located as follows:—Alarm bell, Armory building, Market Street; Franklin School-house, Middlesex Street; Court House, Chapel Hill; Engine House, No. 1, Gorham Street; High Street Church, Belvidere; Varnum School-house, Centralville; West Dracut, Pawtucketville.

LOCATION OF SIGNAL BOXES.

Box.

3. Corner Broadway and Mt. Vernon Streets.
4. Dutton Street, opposite Parker & Cheney's.
5. Corner Cushing and Fletcher Streets.
6. Corner Little and Lewis Streets.
7. Corner Market and Dutton Streets.
8. Corner Westford and School Streets.
9. Corner Common and Salem Streets.
12. Market Street. Police Station.
13. Corner Prescott and Merrimack Streets.
14. Corner Fayette and Andover Streets. Belvidere.
15. Bleachery Street, near Lowell Bleachery.
16. Hosford Square. Chapel Hill.
17. Corner Middlesex and Walker Streets.
18. Junction Hale and Lincoln Streets.
19. Corner Union and Gorham Streets.
21. Corner Kirk and Merrimack Streets.
23. Corner Coburn and River Streets. Centralville.
24. Corner Middlesex and South Streets.
25. Merrimack Street. Tremont House.
26. Corner Fletcher and Pawtucket Streets.
27. Pawtucketville.
28. Corner Hall and Cabot Streets.
31. Corner High and East Merrimack Streets, Belvidere.
32. Corner Bridge and Tenth Streets. Centralville.
33. Corner Broadway and Walker Streets.
34. Lincoln Street, Ayer's City.
35. Corner Charles and Lawrence Streets.
36. City Farm, on pole.
41. Corner Wyman and Nesmith Streets, Belvidere.
42. Middlesex Street, near Northern Depot.
43. Highland Street, Edson School House.
45. Branch Street, Steamer House.
46. Bridge Street, Centralville.
51. Junction Central and Thorndike Streets.
52. Corner Austin and Moody Streets.
53. Central Street, Lowell & Andover R. R. Depot.
61. Lawrence Street, above Stott's Mills.
62. Corner School and Bowers Streets.
63. Corner Hale and Howard Streets.
64. Corner Third and Myrtle Streets.
71. Middlesex Village.
72. Middlesex Street, opposite Huntoon's Stable.
81. Corner Pine and Wilder Streets.

INSTRUCTIONS TO KEY-HOLDERS.

1. Alarms must be given from the box nearest the location of the fire.


2. Upon the discovery or *positive* information of a fire, you will unlock the box, pull down slide or hook *once* only, and let go. This gives the desired alarm all over the city, repeating itself four or five times.

3. Each box contains a small bell, which, if heard before you pull the hook, indicates that the alarm has been previously given from another box. In such cases *do not* pull the hook, until you are sure the alarm has been completed.

4. Never signal for a fire seen at a distance ; never touch the hook except to give an alarm of fire. Give an alarm for no cause, other than actual fire. Be sure and *close the door* on leaving the box.

5. Second alarm for the same fire will be given only by one of the Engineers.

6. Never let the key go out of your possession, unless called for by the Chief Engineer. If you change your residence or place of business, where the key is kept, return the key to the same officer.

 Keys to boxes are in possession of responsible persons, in the vicinity of the signal boxes ; also in the hands of the police. Citizens are requested to inform themselves where keys to the signal boxes are kept.

HYDRANTS BY STREETS.

| LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. | LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. |
|-------------------|------------|------------|-----------|-----------|--------------------|------------|------------|-----------|-----------|
| Abbott, | 1 | | | | Coburn, | 2 | | | |
| Adams, | | 6 | | 4 | Colburn, | 1 | | | |
| Agawam, | 4 | | | | Common, | 4 | | | |
| Aiken, | 1 | | | | Conant, | 2 | | | |
| Ames, | 1 | | | | Congress, | 3 | | | |
| Amory, | 2 | | | | Cooledge, | 1 | | | |
| Andover, | 7 | | 1 | | Coral, | 2 | | | |
| Andrews, | 1 | | | | Crosby, | 3 | | | |
| Anne, | 3 | | | | Cross, | 6 | | | |
| Appleton, | 4 | | | | Cushing, | | | | 5 |
| Arlington, | 1 | | | | C. | | | 1 | |
| Ash, | 1 | | | | Davidson, | 2 | | | |
| Barclay, | | | 1 | | Dodge, | 1 | | | |
| Bartlett, | 2 | | | | Dover, | 3 | | | |
| Beach, | 1 | | | | Dummer, | 1 | | | |
| Bleachery, | 8 | | | | Durant, | 2 | | | |
| Blossom, | 1 | | | | Dutton, | 7 | 1 | 4 | |
| Bowers, | 1 | | | | Eleventh, | 1 | | | |
| Branch, | 6 | 3 | | | Elm, | 3 | | | |
| Bridge, | 9 | | 1 | 3 | East Merrimack, | 4 | | | |
| Broadway, | 4 | 6 | | | East Pine, | 2 | | | |
| Butterfield, | 2 | | | | Fayette, | 4 | | | |
| Cabot, | 3 | 1 | 1 | | Fairmount, | 1 | 1 | | |
| Cady, | 1 | | | | Faulkner, | 1 | | | |
| Cambridge, | 1 | | | | Fenwick, | 2 | | | |
| Canal, | 2 | | | | Fifth, | 2 | | | |
| Canton, | 1 | | | | First, | 4 | | | |
| Carpet Lane, | 1 | | | | Fletcher, | 7 | | | |
| Carter, | 2 | | | | Ford, | 2 | | | |
| Cedar, | 2 | | | | Fourth, | 2 | | | |
| Central, | 7 | 12 | | | Franklin, | 1 | | | |
| Chapel, | 6 | | | | French, | | | | 4 |
| Charles, | 3 | | | | Fulton, | | | 2 | |
| Chelmsford, | 1 | | 5 | | F. & L. R. Ft. Yd. | | | 1 | |
| Chestnut, | 2 | | | | Gates, | 1 | | | |
| Church, | 4 | | | | George, | 1 | | | |
| Clark, | 1 | | | | Gorham, | 13 | | 2 | 1 |
| Clay, | 2 | | | | Grand, | 3 | | 1 | |
| City Farm Yard, | | | 3 | | Grove, | 2 | | | |
| City Stable Yard, | | | 1 | | Green, | 1 | | | |

HYDRANTS BY STREETS.

| LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. | LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. |
|-------------|------------|------------|-----------|-----------|-------------------|------------|------------|-----------|-----------|
| Hale, | 3 | | | | Moody, | 6 | | | |
| Hall, | 3 | | | | Moore, | 6 | | | |
| Hampshire, | 2 | | | | Mt. Vernon, | 2 | | | |
| Harrison, | 1 | | | | Mt. Washington, | 3 | | | |
| High, | 5 | | | | Myrtle, | 3 | | | |
| Highland, | 2 | | | | Mill, | 1 | | | |
| Hildreth, | 5 | | | | Main, | 1 | | | |
| Howard, | 6 | | | | Nesmith, | 8 | | | |
| Howe, | 2 | | | | Newhall, | 2 | | | |
| Hurd, | 3 | | | | North, | 2 | | | |
| Jackson, | 7 | | | | Oak, | 1 | | | |
| James, | 1 | | | | Oliver, | 1 | | | |
| Jewett, | | | 3 | | Paige, | 2 | | | |
| John, | 1 | | | | Park, | 1 | | | |
| Keene, | 1 | | | | Pawtucket, | 10 | | | |
| Kidder, | 1 | | | | Pine, | 2 | | 1 | |
| Kinsman, | 1 | | | | Pleasant, | 1 | | | |
| Kirk, | 3 | | | | Porter, | 1 | | | |
| Lagrange, | | | | 1 | Prescott, | 1 | | | |
| Lane, | 2 | | | | Prince, | 2 | | | |
| Lawrence, | 8 | | | | Priv. Corp. Lane, | 1 | | | |
| Lee, | 1 | | | | Prospect, | 1 | | | |
| Lewis, | 2 | | | | Phil, | | | 1 | |
| Liberty, | 5 | | | | Queen, | 1 | | | |
| Lincoln, | 8 | | | | Railroad, | 2 | | | |
| Linden, | 3 | | | | River, | 6 | | 3 | |
| Little, | 1 | | | | Robinson, | 1 | | | |
| Livingston, | 1 | | | | Rock, | 3 | | | |
| London, | 3 | | | | Salem, | 4 | | | |
| Loring, | 2 | | | | School, | 9 | | | |
| Lyons, | 1 | | | | Second, | 1 | | | |
| Madison, | 1 | | | | Seventh, | 1 | | | |
| Mansur, | 1 | | | | Shedd's Avenue, | | 1 | | |
| Market, | 7 | | | | Simpson, | 1 | | | |
| Marshall, | 2 | | | | Sixteenth, | | | 1 | |
| Mead, | 1 | | | | Sixth, | 4 | | | |
| Merrimack, | 5 | 9 | 1 | 4 | Smith, | 4 | | 1 | |
| Methuen, | 3 | | | | South Highland, | 1 | | | |
| Middle, | 5 | 1 | | | South, | 3 | | | |
| Middlesex, | 13 | 11 | 6 | | Stackpole, | 4 | | 1 | |

HYDRANTS BY STREETS.

| LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. | LOCATION. | NEW FLUSH. | OLD FLUSH. | NEW POST. | OLD POST. |
|------------------|------------|------------|-----------|-----------|-----------------|------------|------------|-----------|-----------|
| Stevens, | 3 | | | | Warren, | 1 | | | |
| Suffolk, | 4 | | | | Washington, | | | 1 | |
| Summer, | 6 | | | | Water, | 3 | | | |
| Tenth, | 3 | | | | Watson, | 1 | | | |
| Third, | 6 | | | | Western Avenue, | 2 | 1 | | |
| Thirteenth, | 1 | | | | Westford, | 5 | | 3 | |
| Thorndike, | 5 | | | | West Fourth, | 2 | | | |
| Tilden. | 2 | | | | West Fifth, | 1 | | | |
| Tremont, | 3 | | | | West Sixth, | 4 | | | |
| Tyler, | 3 | | | | West Union, | 1 | | | |
| Taylor, | 1 | | | | Whipple, | 1 | | | |
| Tucker, | | | 1 | | Wilder, | 5 | | 1 | |
| Union, | 1 | | | | William, | 2 | | | |
| Varney, | 3 | | | | Willie, | 2 | | | |
| Vernon, | 2 | | | | Winter, | 1 | | | |
| Walker, | 9 | | | | Worthen, | 6 | | | |
| Walnut, | 2 | | | | West, | | | 1 | |
| Wamesit, | 2 | | | | Pawtucketville, | | | 25 | |
| Wamesit Power Co | 1 | | | | | | | | |
| Wannalancet, | 2 | | | | | | | | |

| | | | | | |
|------------------------------------|---|---|---|---|-----|
| Number of Flush Hydrants, 5 inch | - | , | - | - | 518 |
| “ “ 2 $\frac{1}{4}$ “ | - | - | - | - | 52 |
| “ Post Hydrants, 2 $\frac{1}{4}$ “ | - | - | - | - | 22 |
| “ “ 2 $\frac{1}{2}$ “ (new) | - | - | - | - | 75 |
| Total, | - | - | - | - | 667 |

RESERVOIRS.

- 1 on Chestnut, corner of Willow Street.
- 1 on Myrtle, at head of Fifth Street,
- 1 on Fourth, near Read Street.
- 1 on Bridge, corner of Seventh Street.
- 1 on Tyler, corner of George Street.
- 1 on Union, corner of Chapel Street.
- 1 on Chapel, corner of Keene Street.
- 1 on Central, at Hosford's Square.
- 1 on Westford, corner of Grand Street.
- 1 on Branch, corner of Queen Street.
- 1 on Middlesex, corner of Wilder Street.
- 1 on Forest Street.
- 1 on Salem, corner of Decatur Street.
- 1 on Cross, between Fletcher and Willie Streets.
- 1 on Varney, near Mt. Vernon Street.
- Two openings in Canal on Moody Street.

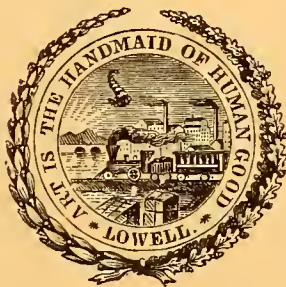
SEVENTH
ANNUAL REPORT
OF THE
LOWELL WATER BOARD

OF THE CITY OF LOWELL,

To the City Council,

ACCOMPANIED BY THE REPORTS OF THE CITY ENGINEER
AND OF THE SUPERINTENDENT OF WATER WORKS,
TO THE WATER BOARD.

JANUARY 12, 1880.



LOWELL, MASS.:
VOX POPULI PRESS: HUSE, GOODWIN & CO., 130 CENTRAL ST.
1880.

CITY OF LOWELL.

IN COMMON COUNCIL, Jan. 13, 1880.

Read, and sent to the Board of Aldermen.

DAVID CHASE, *Clerk.*

IN BOARD OF ALDERMEN, Jan. 13, 1880.

Received and read.

SAMUEL A. MCPHETRES, *City Clerk.*

WATER BOARD, 1880.

President ALBERT A. HAGGETT.

Term expires first Monday in May, 1881.

JAMES W. BENNETT.

Term expires first Monday in May, 1880.

Alderman ROBERT WOOD.

Councilman EDWARD B. PEIRCE.

Councilman CHAS. C. HUTCHINSON.

Clerk JAMES M. BATTLES.

Regular meetings of the Water Board, Friday evenings, at 7½ o'clock.

Superintendent of Works HORACE G. HOLDEN.

Foreman of Works DANIEL D. FRASER.

Engineer at Pumping Station JAMES P. ROBERTS.

Inspectors.

JOHN J. BANCROFT.

ANDREW J. DEVOLL.

THOMAS G. GERRISH, JR.

HENRY E. SPRAGUE *Inspector of Meters.*

The Water Office is open daily, from 9 A. M. till 12 M., and 2 till 5 P. M., and on Monday evenings, from 7 to 8 o'clock.

WATER BOARD, 1879.

President, ALBERT A. HAGGETT.

JAMES W. BENNETT.

Councilman EDWARD B. PEIRCE.

Alderman HORACE R. BARKER.

“ ROBERT G. BARTLETT.

Clerk, JAMES M. BATTLES.

Superintendent of Works HORACE G. HOLDEN.

REPORT OF THE WATER BOARD.

OFFICE LOWELL WATER BOARD,
LOWELL, MASS., Jan. 12, 1880.

To the City Council of the City of Lowell.

GENTLEMEN — The Lowell Water Board, in compliance with the Ordinances of the City, beg leave to present herewith for your consideration the Seventh Annual Report of the Board, and to extend congratulations upon the continued prosperity which attended the Works during the year just ended; and also to bespeak for the Works the continued interest and generous support heretofore awarded by your predecessors in the City Council.

The first meeting of the Board, for the year 1879, was held on the 17th of January, the Board being then composed of the following members: Albert A. Haggett and James W. Bennett from the citizens, Alderman Horace R. Barker, Councilmen Edward B. Peirce and Robert G. Bartlett.

During the year regular weekly, as well as many special, meetings of the Board have been held, for the consideration of matters connected with the

welfare and management of the important trust committed to our care.

ORGANIZATION.

The Board met on the first Monday in May, in accordance with the requirements of the City Ordinance, for the annual organization. There was present the entire Board, composed of the before-mentioned members.

Albert A. Haggett, who had been re-elected by the City Council for the two years ensuing, was re-elected President of the Board, and James M. Battles was re-elected clerk.

INSPECTION.

One of the earliest subjects claiming the attention of the Board, was the inspection of fixtures; and the President and Superintendent early in January were appointed a committee to examine into the subject, and report whether any changes in this department were needed to render it more efficient than heretofore. February the 7th, the committee reported in favor of the appointment of an additional inspector, owing to the largely increased number of water-takers, and Mr. Thomas G. Gerrish, Jr., was appointed. The city was divided into three districts by wards, and assigned to the inspectors, with rules for their government.

They were instructed to visit all premises, where notices of vacancies had been given, semi-monthly,

and record, in a book kept for the purpose, whether such vacancies existed, and also when they ceased to be vacant. A careful examination of all water-tanks supplied through ball-cocks, was ordered. Very many leaks were thus discovered, where by the non-closing of the cocks, much water was running to waste through the overflow pipes connected with the tanks. In addition to their former duties, we have instructed each inspector to take the record of every water-meter within his district semi-monthly, and have thus been enabled to discover the stoppage of any meter, much earlier than under the old system, when one inspector only had charge of this department of inspection.

The multitudinous and arduous duties of this department have been faithfully performed, and we congratulate ourselves upon having such efficient inspectors as Messrs. John J. Bancroft, Andrew J. Devoll, and Thomas G. Gerrish, Jr., have proved themselves to be, as upon their faithfulness and efficiency depends, in a great degree, the revenue derived from the use of water. During the ensuing year it is the intention of the Board to cause a personal inspection of all premises where water is used, by the inspectors, in order that a correct record may be had of all water-fixtures in use. We deem this advisable in order that any changes which may have taken place in the fixtures, since the original inspection of the premises, may be discovered, and a record thereof taken.

EXTENSIONS OF WATER-PIPE.

There have been several extensions of street mains called for, and laid, which at the beginning of the year were unforeseen, and a considerable number which were anticipated.

Of the latter, the line of 6-inch pipe to the Edson Cemetery, which was reported on favorably last year, but which was not laid at the time, on account of more pressing extensions, has been completed, and all our burial-places have now the needed supply of city water.

This line, although not at present a source of much revenue, was urgently called for by lot-owners in the Edson Cemetery, and will ere long prove a paying line, as much available land for building purposes is to be found beyond the Fair Grounds, and in the immediate vicinity. Several extensions connected with this line, have already been laid, to supply houses which have been built during the past season, on Fay, Pihl, and Lundberg streets. September 1st, an extension of this line, from the Edson Cemetery to the city line, was asked for, but the Board did not deem it advisable to lay the same.

An extension of 8-inch pipe has been laid on River street, for a distance of 1,536 feet, supplying many houses before unsupplied, and rendering much land in the near vicinity more available for building purposes. An 8-inch pipe on Westford street, from

School to Coral street, has been laid. A 6-inch pipe was extended on Mill street, to connect with Wamesit street; also a 6-inch pipe on West Pine street, from Stevens to Robbins street. A 6-inch pipe has been put in from Mount Washington to Fletcher street; also one extended on Seventh avenue to the Mammoth road, for a better circulation in that neighborhood.

An extension of 8-inch pipe through Powell, from Chelmsford to Smith street, with a 6-inch connection through the latter street to the Shaw Stocking Co.'s mill, has been laid. These are some of the principal lines which have been laid during the year, and we have been obliged to take out several small supply-pipes previously laid, on account of the increase of buildings, which made it necessary for a larger pipe, to give the needed supply. During the present year there will be needed several changes of this nature, in streets where, at the time of original laying, the small pipe was expected to answer its purpose for several years, but which, owing to the increase of buildings, has failed to give the needed supply of water.

Before the present system of water supply was inaugurated, there were laid several lines of cement-lined pipe, for a fire-service supply, and upon the construction of the present Works, these were connected with the present system. This pipe is very unreliable, and is liable at any moment to become broken. There are three principal lines of this

pipe, viz. about three thousand feet of 12-inch on Central street, from Jackson to Walnut street; about four thousand two hundred feet of 12-inch on Middlesex street, from Central to Smith street; and about one thousand five hundred feet of 10-inch on Broadway, from Willie to School street.

The subject of taking up this pipe, and replacing it with cast-iron pipe, has in previous years been before the Board for consideration, but the pressure of other extensions has prevented any action in that direction. We would earnestly recommend to our successors on the Water Board the advisability of the changes here suggested, and would recommend that, during the present year, there be laid about two thousand feet of the Middlesex street line, with iron pipe, from Thorndike to Smith street, and the connection of the same with the pipe now laid from Thorndike through Middlesex and Jackson streets. Should this be done, the large section of valuable property on the upper portion of Middlesex street, so much in danger of destruction by fire, owing to its peculiar construction, and the nature of the business transacted in that vicinity, would be assured of a safe and sure supply of water. The cement-lined pipe already in, need not be removed until actually unfit for use, while the new line would at once be available in case of need. We have on hand, at the pipe-yard, partially enough pipe of the requisite size, to lay this line.

There has been a much greater demand for

street mains than was anticipated at the commencement of the year, owing to the large number of new buildings erected during the year; and should the present favorable business outlook continue, there will undoubtedly be many calls for further extensions during the year to come, principally in the outlying districts.

At the present time, every extension asked for during the year, and considered by the Board as being needed, has been laid, and our city is well prepared with the means of procuring a full and generous supply of pure water.

HYDRANTS.

The Chief Engineer of the Fire Department, and the Chairman of the Committee on said department, during the past year appeared before the Board, to urge the substitution of new and improved four-way hydrants, in various portions of the city, now supplied with the old pattern hydrants, and where greater facilities were much needed for an increased water supply, in case of conflagration. Unfortunately the Board was crippled by the small appropriation placed to the credit of the appropriation for Water Works, by the last City Council, —it being \$8,000 less than was recommended by the Board, as needed for the contemplated work to be done; and we were only enabled to comply, in a small degree, with their requests. Two four-way

hydrants have been set: one of the Chapman Valve Company's make, at the head of Central street, near the Post-office; and one of the Pattee & Perkins' make, at the corner of Middlesex and Grand streets. Several others will be needed during the coming season, and we trust that the present City Council will not follow in the footsteps of its predecessor, in reducing the needed appropriation with which to carry out all reasonable and proper plans of the Board, even under the specious cry of retrenchment.

During the year, all the covers of flush hydrants, having plain surfaces, have been removed, and those with ribbed or rough surfaces substituted. This change was deemed advisable, to prevent accidents, liable to occur from slipping upon them, when the sidewalks are in an icy or snowy condition.

CHANGES IN THE ORDINANCE RELATING TO THE CARE AND MAINTENANCE OF THE WORKS.

In September, the Board voted that the President, Superintendent, and Clerk be a committee to consider whether any changes are needed in the ordinance pertaining to the Water Works; and after a long and careful consideration, and the careful comparison of the ordinances in force in other cities, having similar Works, together with the experience gained by observation of the workings

of our own ordinance, the committee reported an ordinance, amending chapter 41 of the present ordinances, and the same was recommended, by vote of the Board, for adoption to the last City Council, on December 12th.

The Common Council adopted the recommendations of the Board, but at the final meeting of the City Council, the Board of Aldermen, after making some changes in the same, referred the ordinance to the present City Council, in which reference the Common Council concurred. The changes, as proposed by the Water Board, are called for, and experience in this department has shown that they would be beneficial to the city's interest, and the changes therein suggested would not result in any considerable degree to the detriment of the water-takers. As the work preparatory to the annual taking of the water rates will soon commence, it is desirable that whatever action the City Council may take in regard to the matter, be completed at once, in order that the same can be made operative for the present year.

CLAIMS.

Early in the year, a petition of Abel Coburn, for compensation for land taken and damages caused by the construction of the filter inlet, in the year 1876, which was referred by the City Council to the Board, was considered, and an offer

was made to Mr. Coburn, of \$500, for all the land owned by him, between the present filter gallery and the river, in consideration that he would relinquish all claims for damages alleged in the construction of the filter inlet. Mr. Coburn refused the offer; but later in the year he appeared before the Board, and after further consideration, the offer was renewed, and it was accepted by him. The Board thought by their offer to avoid any litigation upon the matter in the courts; but upon consultation with the City Solicitor, in relation to the necessary deeds for the transfer of the land in question, it was found that in the original taking of Mr. Coburn's land by the Water Commissioners, for the construction of the filter gallery, for which Mr. Coburn was paid \$1,000, the city had acquired the right to enter upon said land, make repairs, dig up the land, and do anything which might be deemed necessary for the maintenance of the Works, even to the digging up of his entire land between the gallery and the river, if deemed advisable for the proper supply of the Works; and, in the opinion of the City Solicitor, no court would ever permit a jury to adjudicate upon such a claim as Mr. Coburn alleges for damages. Acting upon this opinion, the Board voted to rescind their former action in offering him \$500, and returned his petition for damages to the City Council, with a recommendation that he be given leave to withdraw.

METERS.

There are now in use 584 meters, 207 having been set during the year, while but 148 were set in 1878, thus showing a steady increase in the number of takers using water by metered rates. Early in the year a general complaint was manifested in regard to the low pressure of water, existing in many premises where meters were in use, and in many places a complete stoppage of the meter had taken place. It was found, upon examination, that many of the meters, especially those which were among the first put in, had become so rusted and clogged as to fail to register correctly, and quite a number were in so bad a condition as to prevent the flow of water. The Superintendent immediately began a thorough inspection of all meters in use; those in regard to which any doubt of accuracy existed, were disconnected, taken to the shop at the pipe-yard, cleaned, tested, and then re-set. 214 meters have thus been treated, and a large amount of water-rates secured to the city, which otherwise would have been lost by the failure of proper registration of the meters so treated.

By the semi-monthly taking of the meters by the inspectors, this difficulty will be obviated in the future, as any discrepancy in their returns will call attention to the meter, and its accuracy can be tested.

In June the Board voted to grant no application

for meters to be set in premises, where the yearly rates had been paid. This action was deemed necessary, to avoid the complications of the accounts of the Board, and to prevent the large number of abatements which would have to be made, in the adjustment of the accounts from regular to metered rates. Parties applying for meters to be attached to new services, against which no charge has been made, are supplied. In the new ordinance now before the City Council for action, it is provided that no meter shall be set during the year in any premises, after the annual rates have been assessed upon said premises, and this provision we especially recommend for your favorable consideration.

WATER MOTORS.

September 12th, a joint order was received from the City Council, instructing the Board to consult with the Proprietors of the Locks and Canals on Merrimack River, to see upon what terms the city can permit the citizens to use water motors, for propelling light machinery, of from one-eighth to eight horse-power.

The subject was referred to the President of the Board, with instructions to carry out the order of the City Council, by conferring with the agent of said Proprietors; and on October 8th, the following communication was made to James B. Francis, Esq., Agent of Proprietors of Locks and Canals on Merrimack River.

OFFICE OF LOWELL WATER BOARD,
LOWELL, Oct. 23, 1879.

JAMES B. FRANCIS, ESQ., *Agent of Proprietors of Locks and
Canals on Merrimack River, Lowell, Mass.*

DEAR SIR—Enclosed please find copy of an order passed by the City Council Sept. 9, 1879, instructing the Water Board to consult with your Company, in relation to the subject-matter therein contained. Will you please lay the subject before your Company, and advise the Water Board of the result at your earliest convenient opportunity?

Yours truly,

A. A. HAGGETT,

President Lowell Water Board.

December 8th, the following reply to the communication was received, and by vote of the Board was transmitted to the City Council.

A. A. HAGGETT, ESQ., *President Lowell Water Board.*

DEAR SIR—Your communication of the 23d of October last, enclosing a copy of the resolution of the City Council, passed on the 12th of September last, viz. —

“That the Water Board be instructed to take immediate action in consulting with the Proprietors of the Locks and Canals, to see upon what terms the city of Lowell can permit its citizens to use water-motors of from one-eighth to eight horse-power, for the purpose of running sewing-machines, lathes, coffee-mills, printing-presses, and other light machinery,”

has received the respectful and careful consideration of the Directors of the Proprietors of the Locks and Canals on Merrimack River, and the subscribers are instructed to inform you of the conclusions which have resulted from such consideration.

The title of the Proprietors of the Locks and Canals in the water-power created by their dam, is held for the use of the several manufacturing companies, and the Lowell Machine Shop, which constitute the stockholders of said Proprietors. To each of these corporations has been conveyed a certain number of mill-powers, which, in the aggregate, comprise the entire reliable water-power of the river, said Proprietors retaining only such surplus water as exists at uncertain times during part of the year. The proposition under consideration, therefore, affects particularly all these corporations.

For a period of more than thirty years, these corporations have required and used for the operation of their machinery, all the water ordinarily flowing in Merrimack River. Indeed, the natural flow of water, having proved insufficient during a large portion of the year, for the operation of their mills, these corporations, under authority of the Legislature of Massachusetts, have expended about four hundred thousand dollars in a neighboring State, in increasing, by reservoirs and other artificial means, the supply of water during the periods of deficiency. But even with this increase, and the most economical application and use of water possible, the supply is greatly inadequate to their necessities, and many of these corporations are compelled to add steam-power for the operation of their machinery. It is therefore evident, that the power of whatever water is diverted from the works of these corporations, must be replaced by steam-power at just so much additional cost of their operations.

Under these circumstances, it cannot be reasonably expected that these corporations will consent to the diversion of their water, for the purposes proposed, unless it is made to appear to them that some commensurate good is thereby to be obtained.

As these corporations own a large portion of the taxable property of the city, and hence must bear a proportionate share of its burden of taxation; as they are interested in large tracts of unimproved land, for which they desire a

market; and as their operatives and other employees, with their families, constitute a large portion of the inhabitants of the city, they feel that they have a deep interest, in common with all others owning real estate, or having other *permanent* interests in the city, in whatever contributes to or militates against its prosperity, and especially in whatever affects the health and comfort of its inhabitants, and promotes or impairs its advantages and eligibility as a place of residence and homes. Therefore, in determining the expediency of giving or withholding consent to the present proposition, it has been considered proper to examine the probable effect of the contemplated new appropriation of the water, upon the interests of the city, and the convenience and health of the inhabitants.

It will be apparent to any intelligent mind, upon a little reflection, that the power to be obtained in the manner proposed, would be a very expensive one, as only a fraction of the power expended in pumping the water into the reservoir could be realized. The water is raised by the pumping-engine about one hundred and seventy feet, into the reservoir in Centralville; from the reservoir it is carried in pipes across the river, and distributed in the various streets of the city, and into the houses and other buildings where it is used, losing some of its power in every foot of pipe it flows through, and at every angle and bend, and is finally delivered at an elevation much above that from which it was originally raised by the pumping-engine. Another and very large loss will occur at the motor itself, and it is believed that on an average less than one-fifth of the power expended in raising the water into the reservoir would be realized from its use for power in the manner proposed. That is to say, for each horse-power realized, more than five horse-power of steam must be expended by the city.

In view of the great expense to the city in creating the power, it does not seem probable that the city can derive from it any considerable revenue above that cost.

In the above suggestions relative to the cost of producing the proposed motive power, no account is made of the increased wear of the engines and pumps necessarily attendant upon the increased demand upon them; nor is any account made for the cost of constructing any additional works which may become necessary in consequence of the increased consumption of water.

It is estimated that the ultimate capacity of the city's Water Works is about six millions gallons of water per day. During the current year the consumption of water has reached about three millions of gallons per day. The use of water is constantly increasing, and it is obvious that there is now no more than a reasonable margin for the future wants of the city, with the present uses of the water.

As the quantity of water required for any given power depends so much upon the elevation and degree of perfection of the motor, its distance from the reservoir, the size of pipe through which it is drawn (the service pipes as well as the city mains), the quantity of water drawn from the same pipes for other purposes, and other circumstances, it is impossible to state with accuracy the average quantity of water that would be required to furnish any stated power in different parts of the city; but considering the average level and distance from the reservoir of the most densely settled portions of the city, the probability of the use of the motors quite commonly in upper stories of buildings, and the size of the present mains, and demands upon them for present uses, it may safely be said that the average quantity of water required to supply each motor of eight horse-power, would be more than 500,000 gallons for each ten hours, and that six such motors would consume a quantity of water exceeding the entire present consumption, and with the present consumption would be beyond the ultimate capacity of the present Water Works.

From this it is apparent that if the water should be used for motive-power, as proposed, to any such extent as to

appreciably increase the industries of the city (the object understood to be sought), either the city must enlarge its Works, or the use of the water by the inhabitants for the purposes for which it is now appropriated must be greatly restricted and curtailed. No considerate person will advise the first alternative, and the inconvenience and sacrifice of the inhabitants by the second, would far outweigh any possible advantages from the proposed new use of the water.

The primary, and infinitely more important, purpose of the city's Water Works, is to furnish the inhabitants with an abundant supply of pure water, for drinking and other domestic purposes. It is well known that the water of Merrimack River, in its natural flow (at least during a great portion of the year), is unsuitable for these uses without effective filtering. To meet this necessity (of filtering), the city has been to great expense in the construction of a filtering gallery and other works, but as the consumption of water has increased, these works have proved insufficient. The Water Board has for a considerable time been engaged in investigations and experiments, in the effort to supply this deficiency, but so far, it is understood, without satisfactory results, and consequently a considerable portion of the water supplied by the city, is taken directly from the river and unfiltered. If the consumption of water is increased by its appropriation as motive-power for propelling machinery, it is manifest that the proportion of the supply to be taken directly from the river and unfiltered, to be used for all purposes, must be increased to the same extent. It is believed that the inconvenience, annoyance, and injury to health, which would be thus sustained by the inhabitants of the city generally, would far more than counterbalance any advantages to be derived from the use of the water as motive-power.

For these reasons, and others which cannot be properly stated within the reasonable limits of this communication, it appears to these corporations, that while the diversion of their

water-power for the purposes contemplated, would be injurious to them, it is probable that it would also be productive of more evil than good to the city of Lowell, and its inhabitants generally; and they feel constrained not only to withhold their consent, but to earnestly remonstrate against the appropriation of the water taken by the city, for propelling machinery in the manner proposed.

Very respectfully,

R. S. FAY,

President Locks and Canals.

JAMES B. FRANCIS,

Agent Locks and Canals.

DEC. 2, 1879.

As will be seen, the reply was adverse to the use of the water for the purposes contemplated in the order of the City Council. The Board understood that for the granting of the right contemplated in the order, the authority of the Legislature would be necessary before such use of the water could be allowed. While there is no doubt that the use of the water for motive-power, as contemplated by the order, would be hailed with delight by many of our citizens, yet it is very questionable whether the good results from such use would not be more than counterbalanced by the increased expense attending such use, as is strongly and ably set forth in the reply before mentioned. No citizen, we think, would desire to so tax the resources of our present Works, as to render an immediate enlargement of the same necessary, not, at least, until all portions of our city are fully supplied with water for

domestic purposes, or while, in the near future, a High Service Supply seems to be imperatively demanded. Should any action be taken towards obtaining the right to use the water for motive-power, by petition to the Legislature, and the right acquired, the question of damages to be paid to the Proprietors of the Locks and Canals Company would be presented; and the fact that we have already paid \$50,000 to that corporation for the rights we now hold, should lead us to make haste slowly in going forward in any direction which may lead to still further payments for additional rights in the water; especially when we are now in the enjoyment of the right to use whatever water is needed for the creation of steam-power.

RETURNS TO THE STATE BOARD OF HEALTH.

An Act passed by the Legislature at its last session, makes it compulsory upon all Water Boards to return answers once in three years, commencing in the year 1879, to the State Board of Health, to certain questions promulgated by said Board of Health, under pain of a penalty of \$50 for neglect to answer. Many of the questions propounded by said Board of Health are quite proper, and can be answered with some degree of accuracy; but to render an answer to some of the questions propounded, would require a large expenditure of time and money, and the employment of much outside talent

not usually found upon Water Boards in general, nor upon our own Board in particular. We append herewith one or two of the questions presented, to answer which correctly, would require more time and money than we have at our command.

“Question 4. The area of water-shed supplying such source or sources?”

“Question 5. The general geological and topographical character of the water-shed?”

“Question 8. Whether the water-shed is wholly or in part that of other lakes, rivers, ponds, or reservoirs, besides that used by the party making return, and if so, to what extent?”

When we consider that our source of water-supply is the Merrimack River, its course extending far back into New Hampshire, with almost innumerable lakes, ponds, and rivers connecting therewith, the utter absurdity of an attempt to render an intelligible or reliable answer will be apparent. We have tried to render intelligible answers to the questions proposed, but only regret that upon our Board we have no person of the ability of a Cook, to grapple with the unanswerable, and evolve therefrom the light so much needed by this profoundly profound Board of Health.

Perhaps the consolidation of the former Board of State Charities, and embracing the additional departments of Lunacy, with the former State Board of Health, may account for the seeming tendency towards lunacy, exhibited in some of the questions

which have been propounded; at least, charity would suggest such an excuse for them. In the words of Governor Long, "The whole subject is full of interesting suggestions"; and we are satisfied that good intentions, and a desire to benefit their less-informed fellow-citizens, must have been the motive-power which prompted such profound questioning.

ARTESIAN WELLS.

During the month of November, the Board being desirous of ascertaining whether an additional supply of water could be obtained from Artesian wells, sunk in the neighborhood of the filter gallery, contracted with Mr. J. E. Robinson, a gentleman of large experience in sinking such wells, for the boring of two or more experimental wells. The experiment convinced the Board, that for an additional supply of water in that vicinity, such wells could not be depended upon to furnish any supply of considerable extent. While, at present, the gallery yield, with what we derive from the filter inlet, and by direct river connection when needed, gives an ample supply, we feel that ere long, with the increased demand for water, some method must be devised, either by an enlargement of the original gallery, together with the more often cleansing of the surface of the filter inlet, or by some other means yet undetermined upon, to ensure a larger supply of filtered water. The extension of the gallery, within

a few years, would seem to be the most satisfactory method of increasing our supply.

STATISTICS.

The total amount of water pumped into the reservoir for the year was 739,030,390 gallons, against 689,916,160 gallons in the year 1878; and the daily average pumped was 2,024,768 gallons, against 1,890,180 in 1878.

The quantity of coal consumed during the year, for pumping water, heating engine building, etc., was $671\frac{375}{1000}$ net tons, against $614\frac{260}{1000}$ net tons for the year 1878, thus showing that $550\frac{54}{100}$ gallons have been raised 165 feet high, for every pound of coal consumed during the year.

The total number of services put in, to Jan. 1, 1880, is 5,075, of which number 361 were put in during the past year, or 70 more than in 1878, and 33 more than in 1877; a sure indication of the continued appreciation of the means of water-supply afforded by our system of works.

The total number of water-takers is 11,427, against 10,493 in 1878, a gain for the year of 934.

There are now laid $60\frac{6}{100}$ miles of street mains, —the increase during the past year having been $3\frac{22}{100}$ miles, against $2\frac{98}{100}$ miles during the year 1878.

The total net charges for water rates for the year, after deducting all abatements, and the charges

for service pipes, have been \$106,202.78, against \$99,569.84 for the year 1878, or an increase for the year of \$6,632.94. This is a most gratifying exhibit, showing, as it does, that the net charges for the year only fall \$2,647.22 short of a sum sufficient to pay the entire interest (\$108,850) of our water-debt. Were it not for the large number of abatements made on account of changes from yearly to metered rates, we should have had a sum to the credit of water rates, in excess of the interest on the debt. We have endeavored, and the results have shown that our endeavors have been in the main successful, to manage the workings of this department in a straightforward, business-like manner, insisting that all in its employment should be faithful in the performance of the work committed to them, allowing of no killing of time, in the expectation of reward for so doing upon the arrival of the monthly pay-day, but requiring a full equivalent in work performed, for every dollar expended. In this endeavor, we have been heartily seconded by Mr. Holden, the Superintendent, and all under his superintendence. While in the amount of labor performed, we have exceeded the results of the year 1878, in the amount of pay-roll expenditures, we have the pleasure to record a considerable saving during the year, although there has been an additional inspector upon our working force, as will be shown by the following comparative table. There was paid for labor, office work, salaries of

President of the Board, and Superintendent of the Works, the following amounts, in

| | 1878. | 1879. |
|-----------------------------------|-------------|-------------|
| January | \$1,643 21 | \$1,262 92 |
| February | 1,065 33 | 1,228 22 |
| March | 1,197 36 | 1,318 66 |
| April | 1,407 24 | 1,496 90 |
| May | 1,622 21 | 1,460 15 |
| June | 1,617 25 | 1,721 83 |
| July | 1,865 30 | 1,604 56 |
| August | 1,738 33 | 1,346 69 |
| September | 1,605 14 | 1,232 45 |
| October | 1,836 64 | 1,429 86 |
| November | 1,422 26 | 1,419 74 |
| December | 924 39 | 996 86 |
| | <hr/> | <hr/> |
| | \$17,944 66 | \$16,518 84 |
| President's Salary | 400 00 | 325 00 |
| Superintendent's Salary | 1,650 00 | 1,462 50 |
| | <hr/> | <hr/> |
| | \$19,994 66 | \$18,306 34 |

or a saving of \$1,688.32 for the year, to which should be added the wages paid the additional inspector during the year, of \$596.74, for an equitable comparison with 1878, thus showing a saving in pay-roll expenditures of \$2,285.06 in favor of the past year. This has been accomplished by the faithful adherence to the policy of our predecessors of the Board of 1878, in the matter of retrenchment inaugurated in June of that year, or substantially our own policy, as a majority of the Board of 1878 are members of this Board.

The following table, compiled from all cities in

New England from which we have been enabled to get statistics for the year 1879, will show the amount of revenue received during the year, from water rates; also, the average receipts per mile of pipe laid. It will be observed, that but two cities (Boston and Cambridge) exceed our own in point of receipts per mile of pipe laid.

| CITIES. | Date of construc- tion. | No. of miles pipe laid. | Income from Water Rates. | Average receipts per mile. |
|----------------------------|-------------------------------|-------------------------------|--------------------------------|----------------------------------|
| Boston, Mass. | 1848 | 369.30 | \$1,025,803 14 | \$2,777 69 |
| Cambridge, Mass. | 1855 | 78.73 | 167,375 51 | 2,125 94 |
| Lowell, Mass. | 1873 | 60.66 | 106,202 78 | 1,750 78 |
| Hartford, Conn. | 1854 | 70.00 | 116,939 68 | 1,670 56 |
| Manchester, N. H. | 1872 | 33.75 | 53,068 17 | 1,572 39 |
| Providence, R. I. | 1872 | 151.00 | 229,551 78 | 1,520 21 |
| Lawrence, Mass. | 1876 | 38.58 | 58,287 40 | 1,510 82 |
| Lynn, Mass. | 1872 | 52.00 | 73,791 47 | 1,419 07 |
| Fall River, Mass. | 1873 | 52.05 | 69,691 46 | 1,338 93 |
| New Bedford, Mass. | 1870 | 30.81 | 38,031 21 | 1,234 38 |
| Salem, Mass. | 1868 | 41.00 | 48,937 22 | 1,193 59 |
| Waterbury, Conn. | 1868 | 24.50 | 27,175 85 | 1,109 22 |
| Springfield, Mass. | 1864 | 62.83 | 67,915 99 | 1,081 46 |
| Norwich, Conn. | 1870 | 23.00 | 24,388 32 | 1,060 36 |
| Worcester, Mass. | 1864 | 77.50 | 77,000 00 | 993 55 |
| Concord, N. H. | 1872 | 25.70 | 22,530 00 | 876 65 |
| Taunton, Mass. | 1876 | 27.60 | 23,313 63 | 844 70 |
| New London, Conn. | 1871 | 20.90 | 15,500 00 | 741 62 |
| Fitchburg, Mass. | 1872 | 26.00 | 15,000 00 | 576 92 |

CONTRACTS.

March 3d, a contract was made with the Gloucester Iron Co., Gloucester City, N. J., they being the lowest bidders, for one hundred and eighty-four tons of cast-iron pipe and special castings, needed for the year, at \$27.77 per gross ton, delivered on cars in this city.

March 29th, bids were received and opened, for eight hundred tons of Old Company's Lehigh Coal, egg size, to be delivered and stored within the pumping-station of the Lowell Water Works. The contract was awarded to William E. Livingston, the lowest bidder, at \$4.70 per ton of 2,240 pounds.

FINANCIAL STATEMENT.

The following statement exhibits the receipts and expenditures for the year, the net cost of the Water Works, including the interest on the Water Loan, and all expenses in excess of receipts for water rates, also the total net cost and expenses of the Works by taxation.

| | | |
|---|------------------|-----------|
| Net cost of the Water Works to Jan. 1, 1879, as | | |
| per last Annual Report | \$2,116,170 | 13 |
| Expended during the year, for water- | | |
| pipes, and for laying the same, | | |
| and all other items of construction: | | |
| Materials | \$12,930 | 69 |
| Labor—pay-roll | 7,998 | 34 |
| | <u>20,929</u> | <u>03</u> |
| <i>Amounts carried forward</i> | \$20,929 | 03 |
| | <u>2,116,170</u> | <u>13</u> |

Amounts brought forward \$20,929 03 \$2,116,170 13

Expended for current expenses, including pumping water, maintenance of the works, salaries, etc., as follows:

Pumping—

| | | |
|----------------------|------------|----------|
| Materials | \$5,224 38 | |
| Labor—pay-roll . . . | 2,534 00 | |
| | <hr/> | 7,758 38 |

Current expenses—

| | | |
|---------------------------------------|------------|----------|
| Salaries | \$2,945 86 | |
| Office expenses (including Telephone) | 1,324 53 | |
| Inspection | 1,974 22 | |
| Care of meters . . . | 1,121 36 | |
| Care of hydrants . . . | 781 80 | |
| Care of reservoir . . . | 550 04 | |
| Services of City | | |
| Engineer | 549 13 | |
| Stable expenses . . . | 245 90 | |
| Flushing sewers . . . | 38 50 | |
| | <hr/> | 9,531 34 |

| | | |
|----------------------------------|--|----------|
| Water Meters purchased | | 3,588 02 |
|----------------------------------|--|----------|

Repairs, as follows:

| | | |
|---|----------|--|
| Truss work for pipe at canal crossing near the Prescott Mills | \$ 13 19 | |
| Repairs on Engineer's dwelling | 134 07 | |
| Repairs on shop at pipe yard | 106 85 | |
| | <hr/> | |

| | | | |
|---------------------------------|----------|-------------|----------------|
| <i>Amounts carried forward,</i> | \$254 11 | \$41,806 77 | \$2,116,170 13 |
|---------------------------------|----------|-------------|----------------|

| | | | |
|--|--------------|-------------------|----------------|
| <i>Amounts brought forward,</i> | \$254 11 | \$41,806 77 | \$2,116,170 13 |
| Repairs on terminal gate chamber and filter gallery. . . . | 96 94 | | |
| | | <u>351 05</u> | |
| Expended for the year, exclusive of interest | \$ 42,157 82 | | |
| Interest paid during the year . . . | 107,890 00 | | |
| | | <u>150,047 82</u> | |
| Total expenditures for the year | | | \$2,266,217 95 |
| Total outlay to Dec. 31, 1879. | | | |

CREDITS.

Amounts received by City Treasurer during the year, for water rates, service-pipes, and sundries, as follows:

| | | | |
|--|----------------|---------------------|--|
| For account of 1874 | \$7 08 | | |
| " " " 1875 | 6 67 | | |
| " " " 1876 | 41 29 | | |
| " " " 1877 | 28 73 | | |
| " " " 1878 | 5,726 12 | | |
| " " " 1879 | 104,357 45 | | |
| " " " fees | 18 00 | | |
| | | <u>110,185 34</u> | |
| Net cost of Works, including interest on Water Loan, to Jan. 1, 1880 | \$2,156,032 61 | | |
| Present debt of the city, by bonds and notes, on account of the construction of the Water Works | 1,800,000 00 | | |
| Total amount paid from City Treasury, to Jan. 1, 1880, by taxation, on account of Water Works, in excess of receipts from loans and water rates | \$356,032 61 | | |
| Value of Water Works sinking fund, Jan 1, 1880, | 226,725 92 | | |
| | | <u>\$582,758 53</u> | |

| | |
|--|----------------|
| Net cost of Works, including interest on Water | |
| Loan, to Jan. 1, 1880 | \$2,156,032 61 |
| Whole amount paid by taxation, and by appropri- | |
| ation for the Sinking Fund, and the value of | |
| the accumulation of said fund, Jan. 1, 1880 . | 582,758 53 |
| | <hr/> |
| Debt of the city on account of Water Works, in ex- | |
| cess of Water Works Sinking Fund, Jan. 1, 1880, | \$1,573,274 08 |
| | <hr/> |

The following table will show the gross cost of the Water Works, yearly, from the commencement of the same, to Jan. 1, 1880.

| | |
|--|----------------|
| Expended in 1870 | \$ 95,057 00 |
| “ “ 1871 | 624,151 66 |
| “ “ 1872 | 560,708 40 |
| “ “ 1873 | 349,717 87 |
| “ “ 1874 | 233,370 63 |
| “ “ 1875 | 275,660 78 |
| “ “ 1876 | 221,502 24 |
| “ “ 1877 | 163,814 28 |
| “ “ 1878 | 158,510 15 |
| “ “ 1879 | 150,047 82 |
| | <hr/> |
| Gross cost of Works, to Jan. 1, 1880 . | \$2,832,540 83 |
| Receipts from various sources, to Jan. 1, 1880 | 676,508 22 |
| | <hr/> |
| Net cost of Works, to Jan. 1, 1880 . . . | \$2,156,032 61 |
| | <hr/> |

During the past year, telephonic communication has been established between the office of the Water Works and the Superintendent's residence, pipe yard, and pumping-station. This communication also renders the transaction of business with those of our citizens upon the line of the District Telephone Co., who may desire to communicate with the office, much easier than before its intro-

duction, obviating, as it does, a personal visit to the office in many cases.

For the accommodation of those who are unable to visit the office during the day, for the transaction of business, an additional office hour, on Monday evenings, from 7 to 8 o'clock, has been established.

In closing this report, we desire to commend the faithful and efficient manner in which the duties pertaining to the positions of Superintendent of the Works, Clerk of the Board, and Engineer at the pumping-station, have been performed by the gentlemen in charge of those departments, as, in a great degree, the excellent condition of the Works, and the satisfactory results of the year, are due to their faithfulness and efficiency.

For detailed statistical and additional information concerning the Works, we refer to the reports of the City Engineer and Superintendent of the Works, appended herewith, in each of which will be found much that is interesting, and well worthy of a careful perusal. Annexed will be found the balance sheet of the City Treasurer, showing the charges and receipts for water rates, services, and sundries, for the year ending Dec. 31, 1879.

Respectfully submitted.

A. A. HAGGETT,
J. W. BENNETT,
H. R. BARKER,
EDWARD B. PEIRCE,
R. G. BARTLETT,

Lowell Water Board.

ACCOUNTS OF THE TREASURER.

DR. JOHN H. MCALVIN, *City Treasurer and Collector*

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1873 and 1874.

| | | |
|---|--------------|--------------|
| Amount previously reported | \$139,009 42 | |
| Treasurer's account in excess | 10 68 | |
| | <hr/> | \$139,020 10 |
| | | <hr/> |

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1875.

| | |
|---|-------------|
| Amount previously reported | \$90,109 70 |
| Treasurer's account in excess | 57 38 |

| | | |
|--|-------|-------------|
| | <hr/> | \$90,167 03 |
| | | <hr/> |

of Taxes of the City of Lowell.

CR.

By cash received for water rates, service-pipe, and sundries.

| | | |
|--------------------------------------|-------------------|--------------|
| Amount previously reported | \$137,140 19 | |
| Receipts in February, 1879 | 7 08 | |
| Abatements made by the Water Board | | |
| to Dec. 31, 1879 | 1,872 83 | |
| | <u> </u> | \$139,020 10 |

By cash received for water rates, service-pipe, and sundries.

| | | |
|--------------------------------------|-------------------|-------------------|
| Amount previously reported | \$89,526 65 | |
| Receipts in March, 1879 | \$2 00 | |
| Receipts in October, 1879 | 4 67 | |
| | <u> </u> | 6 67 |
| | | <u> </u> |
| | | \$89,533 32 |
| Abatements made by the Water Board | | |
| to Dec. 31, 1879 | 633 71 | |
| | <u> </u> | \$90,167 03 |

DR. JOHN H. McALVIN, *City Treasurer and Collector*

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1876.

Amount previously reported \$106,299 55

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1877.

Amount previously reported \$103,971 64

Treasurer's account in excess 46 83

————— \$104,018 47

of Taxes of the City of Lowell.

CR.

By cash received for water rates, service-pipe, and sundries.

Amount previously reported \$98,057 26

Receipts in July, 1879 \$ 4 83

Receipts in November, 1879 . . 28 89

Receipts in December, 1879 . . 7 57

| | |
|--|-------|
| | 41 29 |
|--|-------|

| | |
|--|-------------|
| | \$98,098 55 |
|--|-------------|

Abatements made by the Water Board

to Dec. 31, 1879 8,144 88

Amounts due and unpaid, Dec. 31, 1879, 7 29

| | |
|--|--------------|
| | \$106,250 72 |
|--|--------------|

Treasurer's account in deficit 48 83

| | |
|--|--------------|
| | \$106,299 55 |
|--|--------------|

By cash received for water rates, service-pipe, and sundries.

Amount previously reported \$101,187 08

Receipts in March and April, 1879 . . 28 73

| | |
|--|--------------|
| | \$101,215 81 |
|--|--------------|

Abatements made by the Water Board

to Dec. 31, 1879 2,781 06

Amounts due and unpaid, Dec. 31, 1879 21 60

| | |
|--|--------------|
| | \$104,018 47 |
|--|--------------|

DR. JOHN H. McALVIN, *City Treasurer and Collector*

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1878.

| | |
|---|--------------------|
| Amount previously reported | \$108,179 76 |
| January account, 1879 | 522 77 |
| February account, 1879 | 321 59 |
| | <hr/> \$109,024 12 |
| Treasurer's account in excess | 151 10 |

\$109,175 22

of Taxes of the City of Lowell.

CR.

By cash received for water rates, service-pipe, and sundries.

| | | |
|---|-------------|--------------|
| Amount previously reported | \$99,065 33 | |
| Receipts in January, 1879 | 2,802 28 | |
| Receipts in February, 1879 | 1,853 72 | |
| Receipts in March, 1879 | 431 95 | |
| Receipts in April, 1879 | 154 39 | |
| Receipts in May, 1879 | 344 44 | |
| Receipts in June, 1879 | 72 92 | |
| Receipts in July, 1879 | 16 92 | |
| Receipts in August, 1879 | 49 50 | |
| | <hr/> | \$104,791 45 |
| Abatements to Dec. 31, 1879 | 4,337 11 | |
| Due and unpaid, Dec. 31, 1879 | 46 66 | |
| | | <hr/> |
| | | \$109,175 22 |
| | | <hr/> |

DR. JOHN H. McALVIN, *City Treasurer and Collector*

For water rates, service-pipe, and sundries, sent to City Treasurer and Collector of Taxes, for collection, in 1879.

| | |
|---|---------------------|
| March account, 1879 | \$80,622 17 |
| March (metered) account, 1879 | 4,661 29 |
| April account, 1879 | 6,119 67 |
| May account, 1879 | 3,767 76 |
| June account, 1879 | 2,264 39 |
| June (metered) account, 1879 | 4,809 02 |
| July account, 1879 | 2,149 06 |
| August account, 1879 | 1,100 27 |
| September account, 1879 | 1,144 38 |
| September (metered) account, 1879 | 5,694 30 |
| October account, 1879 | 1,089 98 |
| November account, 1879 | 2,378 38 |
| December account, 1879 | 1,223 38 |
| December (metered) account, 1879 | 4,916 72 |
| | <hr/> \$121,940 77 |
| Treasurer's account in excess | 9 00 |
| | <hr/> |
| | <u>\$121,949 77</u> |

of Taxes of the City of Lowell.

CR.

By cash received for water rates, service-pipe, and sundries.

| | | |
|---|-----------|--------------|
| March, 1879 | \$ 57 77 | |
| April, 1879 | 25,809 63 | |
| May, 1879 | 36,952 21 | |
| June, 1879 | 20,829 86 | |
| July, 1879 | 6,682 47 | |
| August, 1879 | 4,377 83 | |
| September, 1879 | 1,151 59 | |
| October, 1879 | 3,857 65 | |
| November, 1879 | 3,698 87 | |
| December, 1879 | 939 57 | |
| | <hr/> | \$104,357 45 |
| Abatements to Dec. 31, 1879 | 9,316 10 | |
| Due and unpaid, Dec. 31, 1879 | 8,276 22 | |

\$121,949 77

SEVENTH ANNUAL REPORT
OF THE
CITY ENGINEER TO THE WATER BOARD.

January 1, 1880.

REPORT OF THE ENGINEER.

OFFICE OF CITY ENGINEER,
LOWELL, Jan. 1, 1880.

To the Lowell Water Board.

GENTLEMEN — The undersigned respectfully submits the seventh annual report of work done by the pumping engines, and the average of the records, as taken at the reservoir during the past year.

The cost of raising water by the Morris engine into the reservoir, this year, was increased twenty-three cents per million gallons, caused by the cost of replacing a broken "key and gib" in the connecting-rod of the pump-plunger, and covering the steam cylinder with asbestos and hair felting.

The Morris engine has pumped 569 gallons, and the Worthington, 439 gallons, of water into the reservoir, per pound of coal used for all purposes. All the coal used was charged to pumping, and no deduction has been made for steam used for heating the engine-room. The records, as formerly, were kept by James P. Roberts, the engineer at the pumping-station.

The following table shows the cost of coal, cost to pump one million gallons of water into the reservoir, and the total quantity pumped during the last seven years.

| MORRIS ENGINE. | | | | WORTHINGTON ENGINE. | | |
|----------------|-------------------------------|---|---------------------------------|-------------------------------|---|---------------------------------|
| YEAR. | Average cost of Coal per ton. | * Cost to raise 1,000,000 galls. of water into reservoir. | Total quantity of water pumped. | Average cost of Coal per ton. | * Cost to raise 1,000,000 galls. of water into reservoir. | Total quantity of water pumped. |
| 1873 | \$8 63 | \$31 88 | 186,683,700 | . . . | | |
| 1874 | 7 85 | 21 25 | 288,060,990 | . . . | | |
| 1875 | 7 81 | 14 33 | 445,017,090 | . . . | | |
| 1876 | 6 83 | 11 54 | 397,768,750 | \$6 94 | \$14 68 | 145,698,140 |
| 1877 | 6 43 | 10 71 | 553,887,540 | 6 50 | 13 05 | 41,559,530 |
| 1878 | 5 48 | 9 13 | 653,323,140 | 5 51 | 11 77 | 36,593,020 |
| 1879 | 4 89 | 8 69 | 652,166,530 | 4 92 | 9 87 | 86,863,860 |

* Not including interest on works.

TABLE SHOWING WORK DONE WITH MORRIS ENGINE (Beam and Fly-Wheel) AND BOILERS, FOR EACH MONTH DURING THE YEAR 1879.

| MONTHS. | No. of days' Pumping. | Average No. of hours' pumping per day. | No. of hours' pumping per month. | No. of strokes made per month. | Average No. of strokes made per minute. | Average head, including friction, in feet. | Quantity pumped per month, in U. S. gallons. | Average quantity pumped per day, in U. S. gallons. | Duty in lbs., 1 foot high, with 100 lbs. coal, used in pumping only, no deduction for ashes or clinkers. | Duty on total coal consumed, no deduction for ashes or clinkers. |
|----------------------|-----------------------|--|----------------------------------|--------------------------------|---|--|--|--|--|--|
| January | 14 | 11-42 | 163-55 | 116,154 | 11.81 | 165.88 | 36,007,740 | 2,571,981 | 98,767,217 | 75,864,785 |
| February | 27 | 10-49 | 292-20 | 201,506 | 11.49 | 165.56 | 62,466,860 | 2,313,587 | 102,303,060 | 81,273,289 |
| March | 25 | 10-39 | 266-15 | 178,006 | 11.14 | 165.24 | 55,181,860 | 2,207,274 | 99,988,815 | 78,180,547 |
| April | 26 | 10-01 | 260-30 | 167,975 | 10.75 | 165.63 | 52,072,250 | 2,002,778 | 103,082,702 | 78,708,450 |
| May | 27 | 11-05 | 299-10 | 202,025 | 11.26 | 165.96 | 62,627,750 | 2,319,546 | 100,663,674 | 79,871,905 |
| June | 24 | 10-59 | 263-30 | 173,210 | 10.96 | 165.96 | 53,695,100 | 2,237,296 | 99,114,186 | 77,904,384 |
| July | 27 | 11-30 | 310-35 | 205,920 | 11.05 | 164.98 | 63,835,200 | 2,364,267 | 99,772,409 | 79,523,233 |
| August | 28 | 11-12 | 313-25 | 201,424 | 10.71 | 165.19 | 62,441,440 | 2,230,051 | 100,014,800 | 78,901,087 |
| September | 27 | 10-49 | 292-10 | 186,000 | 10.61 | 165.37 | 57,660,000 | 2,135,555 | 99,895,186 | 78,099,891 |
| October | 20 | 11-04 | 221-20 | 142,660 | 10.74 | 165.67 | 44,224,600 | 2,211,230 | 99,124,404 | 77,488,103 |
| November | 16 | 10-23 | 166-05 | 107,910 | 10.83 | 164.99 | 33,452,100 | 2,090,756 | 99,025,907 | 73,903,483 |
| December | 29 | 11-16 | 326-35 | 220,973 | 11.28 | 165.30 | 68,501,630 | 2,362,125 | 98,454,416 | 79,002,569 |
| Totals and Averages, | 290 | 10-57 | 3,175-50 | 2,103,763 | 11.04 | 165.48 | 652,166,530 | 2,248,850 | 100,073,389 | 78,512,994 |

TABLE showing Amount of Coal, etc., used for Morris Engine at Pumping-Station, for each Month during the Year 1879.

| MONTHS. | COAL CONSUMED. | | | | Wood for starting fires, in cords. | Oil used, in gallons. | Tallow used, in lbs. |
|---------------------|-----------------------------|-----------------------|----------------------------|----------------------|------------------------------------|-----------------------|----------------------|
| | For starting fires, in lbs. | When pumping, in lbs. | For banking fires, in lbs. | Total coal consumed. | | | |
| January | 8,400 | 50,400 | 6,815 | 65,615 | 2 $\frac{5}{8}$ | 5 $\frac{1}{4}$ | 37 |
| February | 16,200 | 84,250 | 5,600 | 106,050 | 5 $\frac{1}{8}$ | 9 $\frac{1}{2}$ | 63 |
| March | 15,000 | 76,000 | 6,200 | 97,200 | 4 $\frac{7}{8}$ | 7 $\frac{1}{2}$ | 56 |
| April | 15,600 | 69,750 | 6,000 | 91,350 | 5 $\frac{1}{4}$ | 7 $\frac{1}{2}$ | 52 |
| May | 16,200 | 86,050 | 6,200 | 108,450 | 5 $\frac{1}{8}$ | 9 $\frac{1}{2}$ | 64 |
| June | 14,400 | 74,930 | 6,000 | 95,330 | 4 $\frac{3}{4}$ | 7 $\frac{1}{2}$ | 53 |
| July | 16,200 | 87,970 | 6,200 | 110,370 | 4 $\frac{7}{8}$ | 11 $\frac{1}{4}$ | 64 |
| August | 16,800 | 85,950 | 6,200 | 108,950 | 5 $\frac{1}{2}$ | 9 | 65 |
| September | 16,200 | 79,550 | 6,000 | 101,750 | 4 $\frac{7}{8}$ | 8 | 58 |
| October | 12,000 | 61,600 | 5,200 | 78,800 | 4 | 6 $\frac{1}{2}$ | 45 |
| November | 9,600 | 46,450 | 6,190 | 62,240 | 3 | 5 | 34 |
| December | 17,400 | 95,850 | 6,200 | 119,450 | 5 $\frac{1}{2}$ | 9 $\frac{1}{2}$ | 69 |
| Totals | 174,000 | 898,750 | 72,805 | 1,145,555 | 55 $\frac{1}{2}$ | 96 | 660 |

TABLE SHOWING WORK DONE WITH WORTHINGTON DUPLEX ENGINE AND BOILERS, FOR EACH MONTH DURING THE YEAR 1879.

| MONTHS. | No. of days' Pumping. | Average No. of hours' pumping per day. | No. of hours' pumping per month. | No. of strokes made per month. | Average No. of strokes made per minute. | Average head, including friction, in feet. | Quantity pumped per month, in U. S. gallons. | Average quantity pumped per day, in U. S. gallons. | Duty in lbs., 1 foot high, with 100 lbs. coal, used in pumping only, no deduction for ashes or clinkers. | Duty on total coal consumed, no deduction for ashes or clinkers. |
|----------------------|-----------------------|--|----------------------------------|--------------------------------|---|--|--|--|--|--|
| January | 17 | 11-9 | 189-35 | 126,912 | 11.16 | 165.19 | 39,342,720 | 2,314,278 | 76,957,754 | 60,802,507 |
| February | . | . | . | . | . | . | . | . | . | . |
| March | 2 | 10-42 | 21-25 | 12,374 | 9.63 | 162.78 | 3,835,940 | 1,917,970 | 75,309,249 | 61,150,031 |
| April | . | . | . | . | . | . | . | . | . | . |
| May | . | . | . | . | . | . | . | . | . | . |
| June | 3 | 10-22 | 31-05 | 19,071 | 10.23 | 161.88 | 5,912,010 | 1,970,670 | 77,286,239 | 62,703,933 |
| July | 1 | 10-45 | 10-45 | 6,490 | 10.06 | 163.68 | 2,011,900 | 2,011,900 | 68,611,281 | 57,176,065 |
| August | . | . | . | . | . | . | . | . | . | . |
| September | . | . | . | . | . | . | . | . | . | . |
| October | 8 | 11-15 | 90-00 | 54,633 | 10.12 | 164.15 | 16,936,230 | 2,117,029 | 71,421,723 | 59,652,946 |
| November | 10 | 10-32 | 105-25 | 60,726 | 9.60 | 164.13 | 18,825,069 | 1,882,506 | 72,068,397 | 58,616,065 |
| December | . | . | . | . | . | . | . | . | . | . |
| Totals and Averages, | 41 | 10-56 | 448-15 | 280,206 | 10.42 | 163.63 | 86,863,860 | 2,118,631 | 74,136,672 | 59,862,329 |

TABLE showing Amount of Coal, etc., used for the Worthington Duplex Engine, at Pumping-Station, for each Month during the Year 1879.

| MONTHS. | | COAL CONSUMED. | | | | Wood for starting fires, in cords. | Oil used in gallons. |
|-----------|-----------|-----------------------------|-----------------------|----------------------------|----------------------|------------------------------------|----------------------|
| | | For starting fires, in lbs. | When pumping, in lbs. | For banking fires, in lbs. | Total coal consumed. | | |
| January | | 15,300 | 70,380 | 3,400 | 89,080 | | 1½ |
| February | | | | | | | |
| March | | 1,200 | 6,910 | 400 | 8,510 | | ¾ |
| April | | | | | | | |
| May | | | | | | | |
| June | | 1,800 | 10,320 | 600 | 12,720 | | 1 |
| July | | 600 | 4,000 | 200 | 4,800 | | ¼ |
| August | | | | | | | |
| September | | | | | | | |
| October | | 4,800 | 32,440 | 1,600 | 38,840 | | 1 |
| November | | 6,000 | 35,730 | 2,200 | 43,930 | | 1½ |
| December | | | | | | | |
| Totals | | 29,700 | 159,780 | 8,400 | 197,880 | | 6 |

PUMPING-STATION, MORRIS ENGINE.

RUNNING EXPENSES FOR THE YEAR 1879.

| | |
|---|------------|
| Pay of engineer and firemen | \$2,206 00 |
| 295 $\frac{1975}{2000}$ tons of Lehigh coal, @ \$5.43 | 1,604 77 |
| 6 $\frac{1579}{2000}$ tons of Cumberland coal, @ \$5.91 | 40 09 |
| 270 $\frac{910}{2000}$ tons of Lehigh coal, @ \$4.273 | 1,155 65 |
| 55 $\frac{1}{2}$ cords of wood, @ \$4.00 | 222 00 |
| Gas for lighting works | 11 18 |
| 46 $\frac{1}{2}$ gallons cylinder oil, @ \$1.25 | 58 13 |
| 49 $\frac{1}{2}$ gallons spindle oil, @ .50 | 24 75 |
| 660 lbs. tallow, @ .07 $\frac{1}{4}$ | 47 85 |
| 82 lbs. soapstone packing, @ .30 | 24 60 |
| 27 $\frac{1}{2}$ lbs. hemp packing | 7 43 |
| 37 lbs. cotton waste | 4 80 |
| Repairs on pump | 45 65 |
| Re-covering steam-cylinders with asbestos | 105 35 |
| *Repairs on boilers, grates, pipes, and etc. | 41 58 |
| Tools and hardware | 14 92 |
| *Wheelbarrow | 18 00 |
| Engine record-book | 14 00 |
| *Small supplies | 17 67 |

\$5,664 42

| | |
|--|----------------------|
| Cost of raising water into reservoir, per million gallons, | \$8 69 |
| Cost of raising water, per million gallons, one foot high, | .05 $\frac{25}{100}$ |

* Used for both Engines.

WORTHINGTON ENGINE.

RUNNING EXPENSES FOR THE YEAR 1879.

| | |
|---|----------|
| Pay of engineer and firemen | \$328 00 |
| 55 $\frac{310}{2000}$ tons of Lehigh coal, @ \$5.43 | 299 49 |
| 43 $\frac{1570}{2000}$ tons of Lehigh coal, @ \$4.273 | 187 09 |
| 6 $\frac{1}{2}$ cords of wood, @ \$4.00 | 26 00 |
| Gas for lighting works | 1 90 |
| 6 gallons cylinder oil, @ \$1.25 | 7 50 |
| 20 lbs. cotton waste | 3 00 |
| Sundries | 4 00 |
| | <hr/> |
| | \$856 98 |
| | <hr/> |

Cost of raising water into reservoir, per million gallons, \$9 87

Cost of raising water, per million gallons, one foot high, .06 $\frac{3}{100}$

RESERVOIR.

The following table shows the average depth of water, the number of gallons, and the temperature of the water in the reservoir, and also the temperature of the air, for each month. The temperature of the water was taken at 6 A. M. and 6 P. M., and of the air at 6 A. M., 1 P. M., and 6 P. M.

| MONTHS, 1879. | Depth in feet. | Quantity in U. S. gallons. | TEMPERATURE. | |
|---------------------|----------------------|----------------------------------|--------------|---------|
| | | | Of water. | Of air. |
| January | 19.35 | 29,488,800 | 36.1° | 21.5° |
| February | 19.63 | 29,950,900 | 36.0° | 20.9° |
| March | 19.73 | 30,129,100 | 36.8° | 32.0° |
| April | 19.73 | 30,129,100 | 40.9° | 42.1° |
| May | 19.56 | 29,834,400 | 56.4° | 62.6° |
| June | 19.56 | 29,834,400 | 64.2° | 67.2° |
| July | 19.61 | 29,922,800 | 71.2° | 72.7° |
| August | 19.62 | 29,943,900 | 71.3° | 69.2° |
| September | 19.47 | 29,677,700 | 65.3° | 60.7° |
| October | 19.45 | 29,646,900 | 59.2° | 56.0° |
| November | 19.76 | 30,169,800 | 43.5° | 36.3° |
| December | 19.38 | 29,535,000 | 36.5° | 28.4° |

The following table shows the average monthly and daily consumption of water for the year 1879.

| MONTHS, 1879. | Gallons per month. | Gallons per day. |
|---------------------|-----------------------|---------------------|
| January | 74,646,480 | 2,407,950 |
| February | 62,748,870 | 2,241,030 |
| March | 59,580,130 | 1,921,940 |
| April | 51,509,910 | 1,716,990 |
| May | 62,627,750 | 2,020,250 |
| June | 59,747,900 | 1,991,590 |
| July | 66,128,270 | 2,133,170 |
| August | 63,560,470 | 2,050,340 |
| September | 57,241,420 | 1,908,050 |
| October | 60,460,380 | 1,950,330 |
| November | 52,697,850 | 1,756,600 |
| December | 67,518,040 | 2,178,000 |

The average daily consumption of water for the year was about 2,023,200 gallons.

Respectfully submitted.

GEO. E. EVANS.

SEVENTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF WATER WORKS, TO THE BOARD.

January 5, 1880.

REPORT OF THE SUPERINTENDENT.

SUPERINTENDENT'S OFFICE,

CITY HALL, LOWELL, Jan. 5, 1880.

To the Lowell Water Board.

GENTLEMEN — In compliance with the City Ordinance, I have the honor to present the seventh annual report of the Superintendent of the Lowell Water Works, for the year ending Dec. 31, 1879.

Upon taking charge of the Works on the fifth day of May last, I found everything connected with the department in good working condition. The yearly supply of cast-iron pipe, which had been contracted for with the Gloucester Iron Works, of Gloucester City, New Jersey, to be shipped by the 14th of April, did not arrive here till the 16th of June; consequently, I found it necessary to reduce the working force on extensions until the arrival of the pipe; with this exception, no change was made.

THE FILTER INLET

Was cleaned out on the first and second days of June. It had not been cleaned since August of last year.

There was in it an accumulation of silt averaging twenty inches in depth.

This large amount was caused by the unusually large freshet of the previous fall, together with the usual spring freshet. After the silt was removed, sufficient water filtered through to supply the gallery for nine successive days. At the end of that time a small amount of silt (less than an inch in depth) had formed over the top of the bed, rendering the inlet completely impervious to water. The expense of cleaning the inlet was \$93.96. From this it appears that, in order to make the inlet available, the silt should be removed at least three times a month. The cost of the labor connected with it, together with the expense of drawing fresh sand for renewing the top, would probably be about \$25 for each cleaning. But this can be done only a part of the year when the river is low, and when the inlet is free from ice, say from the 1st of June to the 1st of December. When the river is high and the water muddy, with the silt held in suspension, the deposit is so rapid that it is impracticable to attempt to keep the filter bed clean, and of course entirely so to keep the inlet clear of ice in the winter. For these reasons it was not deemed expedi-

ent this year to incur the expense of cleaning the bed frequently, especially as the water in the river, during the time when it would have been practical to cleanse it, has been quite clear.

GALLERY AND SUPPLY CONDUIT.

An examination of the gate-house at the gallery inlet chamber last July, showed that several of the floor timbers were badly decayed. These were replaced by new ones, and a sluice-gate operated by a hand wheel, which had been purchased some time previous, was set at the end of the inlet pipe or river connection.

On the fifth day of September, accompanied by A. A. Haggett, President of the Water Board, and City Engineer Evans, an inspection of the filter gallery and supply conduit was made.

The mason work and everything connected with the filter gallery were found to be in good condition. From eight to ten inches of silt had settled throughout the whole length of the supply conduit, which if it continues to accumulate will have to be cleaned out. Otherwise the conduit was found to be in good condition.

PUMPING-ENGINES AND BOILERS.

In January of the past year, it was found that the pump connected with the Morris Engine

had so much lost motion between the bucket and the plungers, that it was unsafe to run at usual speed. On examination, one key and one gib were found to be broken. After these were replaced the speed of the pump was increased from nine strokes per minute, to thirteen strokes per minute, with perfect safety.

The joints to the jacket-pipes around the cylinders of the Morris Engine, have all been changed from inside the casings to the outside, so that all the joints can now be got at without removing any of the casing. The brick and mortar around the cylinders have been taken away, and both the cylinders have been covered with salamander felting, manufactured by the United States Salamander Felting Company, of this city, E. M. Tucke, Treasurer. Outside of this covering a layer of half-inch hair felting has been placed, and the whole has then been handsomely encased with black walnut. Since this has been done, a saving of one hundred and twenty-two pounds of coal per million gallons of water has been effected.

No repairs have been needed on the Worthington Engine; and, with the exception of a new set of grates, no repairs have been made on the boilers.

The lightning-rod on the chimney, having become corroded and broken, has been put in thorough repair.

THE FORCE-MAIN

And conduit-pipes are in good condition, and no expense has been laid out on them.

RESERVOIR.

The roof of the building over the gate-chamber at the reservoir has been repainted, and the plastering which had fallen from the ceiling inside the building, has been repaired, and the ceiling and walls in both rooms have been tinted. Portions of the reservoir fence having been displaced by action of the frost, have been reset, and the whole fence is being repainted by the man in charge of the reservoir.

There has been no trouble whatever with the distributing main, and everything connected with it is in good condition.

WILDER STREET BRIDGE.

A communication was received from the Superintendent of the Nashua and Lowell Railroad, stating that the 8-inch main which crosses the railroad by the side of Wilder street bridge, was so low that brakemen on top of freight-cars were in danger of being hit by it. The pipe was accordingly raised twelve inches, so that it is now the same height from the track as the bridge.

ITEMS OF OTHER WORK DONE.

Ninety-six feet of 6-inch pipe on Fourth avenue, and one hundred and twenty feet of 6-inch pipe on Seventh avenue, Pawtucketville, have been lowered to conform to a change of grade in those streets.

A new iron watering-trough has been placed at the junction of Agawam street with Lawrence street; also, perforated brass caps have been put over the waste-pipes to all the stone watering troughs.

Two post hydrants, one on Lyon street, and the other on West Pine street, have been changed for flush hydrants.

A flush hydrant on Thorndike street has been changed to Congress street.

A 6-inch four-way post hydrant, with independent gates, of Pattee & Perkins' make, has been set at the corner of Grand and Middlesex streets; also a 6-inch post hydrant, with four $2\frac{1}{2}$ -inch and one steamer nozzle, of the Chapman Valve Manufacturing Company's make, has been set on Merrimack street at the head of Central street.

The old hydrants at these places have been discontinued. Besides these, thirteen post hydrants and three flush hydrants have been set on new extensions.

Two stand-pipes have been put in during the year for Matthias Hutchins, to be used for supplying street watering-carts. One of these is on Jackson street, and the other on Andover street.

LEAKS.

There have been four main pipes broken by blasting on sewer constructions; one main was broken by reason of settling, on a street where a sewer had been built; one cracked pipe; two leaks in cement mains, and four leaks in joints.

FIRE SERVICES.

A 6-inch fire service has been put in for the Belvidere Woolen Company, on Howe street; a 6-inch fire service and hydrant for the Belvidere Woolen Company, at their mill on Lawrence street; and a 4-inch fire service for the Shaw Stocking Company's new mill on Smith street. These services were put in at the expense of the owners.

EXTENSIONS.

The longest extension this season was on Gorham street, from the Fair Grounds to the Edson Cemetery, a distance of 1,971 feet. This extension was laid more for the benefit of the lot-owners in the Edson Cemetery, than with the expectation of its being a paying job for the city. But it has already brought a large territory of vacant land into the market; and since the pipe was laid, nine new houses have already been built, and have taken the water on that line and the branch from it on Fay street.

MAIN PIPE LAID.

The amount of cast-iron main pipe laid is as follows: —

Amount laid during the year 1879, 16,468 feet.
Add amount previously laid . . 303,818 feet.

Total amount cast-iron pipe laid, 320,286 feet, or $60\frac{66}{100}$ miles.

The schedule of sizes is annexed. In addition to the foregoing, there was laid an amount of smaller sizes as follows:—

| STREETS. | LENGTH IN FEET. | | | |
|---|-------------------|-------|--------------------|-------|
| | $\frac{3}{4}$ in. | 1 in. | $1\frac{1}{2}$ in. | 2 in. |
| Dane street | . | 223 | . | . |
| Grand street | 58 | . | . | . |
| Tanner street | . | 376 | . | . |
| Varnum's court, off Fulton street | . | 200 | . | . |
| High street, corner of Chestnut | . | 32 | . | . |
| West London street | 38 | . | . | . |
| Ames place, off School street | . | 159 | . | . |
| Whiting street | . | . | 139 | . |
| Lundberg street | . | 152 | . | . |
| Maiden lane, off Market street | . | 90 | . | . |
| Bowers street | . | . | 160 | . |
| Pond street | . | 58 | . | . |
| Clough avenue, off Hampshire street | . | . | . | 126 |
| April street | . | 375 | . | . |
| Cheever street | . | . | 43 | . |
| Waugh street | . | 113 | . | . |
| Chase street | . | 128 | . | . |
| Making a total of | . | . | 2,470 feet. | . |

PIPE CHANGED.

An amount of small pipe laid in previous years has been taken up, and larger sizes have been laid, as follows:—

Fiske's court, off Thorndike street, 156 feet 2-inch, in place of 1-inch.

Bartlett street, 229 feet 1½-inch, in place of ¾-inch.

Lawrence street court, 218 feet 1½-inch, in place of ¾-inch.

Dummer street, 51 feet 1-inch, in place of ¾-inch.

Dummer street, 86 feet 1½-inch, in place of ¾-inch.

West Sixth street, 393 feet 6-inch, in place of 253 feet ¾-inch.

West street, 319 feet 6-inch, in place of 161 feet 1-inch.

Rolfe street, 30 feet 4-inch, in place of 30 feet ¾-inch.

Cheever street, 250 feet 1½-inch, in place of 90 feet ¾-inch.

Mill street, 392 feet 6-inch, in place of 230 feet ¾-inch.

Green street, 363 feet 4-inch, in place of 120 feet 1-inch.

In the two last-named streets new hydrants were set.

SERVICES.

Complaints are of almost daily occurrence from parties, that the water in their premises has stopped running, or runs in a very small stream.

This trouble almost invariably occurs in houses that are piped with ½-inch iron pipes, and it cannot be expected that much water can be conducted through a pipe of this size, with the accumulation of rust which is always forming. Many large tenement houses, and most of the cheaper class of dwellings, are piped in this manner, and they will all eventually prove a source of trouble and expense

to the owners. Nothing less than $\frac{3}{4}$ -inch iron pipes or $\frac{5}{8}$ -inch lead pipes should ever be used throughout the main lines of any houses.

As soon as any complaint has been made, it has been attended to promptly, but in only nine cases has the trouble been found in the service-pipes between the main and the house.

The total number of services laid during the year is 361; making the whole number laid to date, 5,075.

During the year the water has been shut off from the premises of ten takers for non-payment of water rates, and the number let on upon payment of the rates is eleven, some having been shut off in previous years. The whole number remaining shut off for non-payment is seven.

SERVICE-PIPE LAID.

The amount of service-pipe laid is as follows:—

| | |
|---|----------------------------|
| Laid during 1879, $\frac{3}{4}$ -inch | 9,851 feet. |
| 1 " | 749 " |
| $1\frac{1}{2}$ " | 244 " |
| 2 " | 102 " |
| <hr/> | |
| Total laid during 1879 | 10,946 " |
| Add amount previously laid . . | 194,995 " |
| <hr/> | |
| Total amount | 205,941 feet, or 39 miles. |

WATER METERS.

The number of meters now in use is 584. Of these, 207 have been set the past year. Of the number in use, 32 are owned by the city, 17 others

have been paid for by the school appropriation, and 535 are owned by water-takers.

Since the first of May, 214 meters have been taken out, cleaned, adjusted, and reset. Many of these meters had been running several years, and were found, on being taken out, to be so clogged with rust as not to register with any degree of accuracy; and 31 meters were found to be so badly worn or broken, that they had to be sent to the manufacturers to be repaired.

A water meter, like any other machine, must be cleaned and tested frequently to get accurate results from it. A system has been commenced, of taking the registration twice each month. By so doing, any deviations are more readily detected, and the water bills are made more equitable.

The kinds and sizes of meters now in use are shown by the following—

TABLE OF METERS IN USE, DEC. 31, 1879.

| KINDS. | $\frac{5}{8}$ in. | $\frac{3}{4}$ in. | 1 in. | 1½ in. | 2 in. | 3 in. | 4 in. | | Totals. |
|---|-------------------|-------------------|-------|--------|-------|-------|-------|-----|---------|
| H. R. Worthington, New York. | 336 | 25 | 48 | 3 | 5 | 2 | 2 | . . | 421 |
| Union Water Meter Co., Worcester (Ball & Fitts) | 30 | 21 | 1 | 1 | 1 | . . | . . | . . | 54 |
| Fitts' Rotary | 62 | 18 | 7 | 2 | 1 | . . | . . | . . | 90 |
| W. E. Desper & Co., Worcester | 13 | 2 | 2 | . . | . . | . . | . . | . . | 17 |
| "Standard" | 1 | . . | . . | . . | . . | . . | . . | . . | 1 |
| Motor Register . . . | . . | . . | . . | . . | . . | . . | . . | 1 | 1 |
| Totals | 442 | 66 | 58 | 6 | 7 | 2 | 2 | 1 | 584 |

A method of keeping the accounts has recently been adopted, so that the time and wages of the help employed on each job, and kind of work, are entered separately. The materials used are also charged to the particular job where they are used, whether it be an extension of main, new services, new hydrants, repairs, or other work. By this means a statement of the exact cost of any job can be made up, and a better estimate can be made for new work.

The total gross amount of bills sent to the City Treasurer for collection, for this department, for the year ending Dec. 31, 1879, is as follows:—

| | |
|--|---------------------|
| For water rates | \$95,179 87 |
| For metered water | 20,081 33 |
| | <hr/> |
| Total for the use of water | \$115,261 20 |
| For service-pipe and laying same | \$1,522 51 |
| For meters sold | 3,557 72 |
| For sundry accounts | 2,441 70 |
| | <hr/> |
| Total for pipe, etc. | 7,521 93 |
| | <hr/> |
| Total CHARGES | <u>\$122,783 13</u> |

EXPENDITURES.

CONSTRUCTION ACCOUNT—EXTENSIONS, SERVICES, ETC.

For MATERIALS:

| | |
|---|------------|
| Cast-iron pipe, 548,835 lbs.; special cast- | |
| ings, 15,154 lbs. | \$7,399 63 |
| Wrought-iron pipe and fittings | 1,594 26 |
| Lead | 360 42 |
| | <hr/> |
| <i>Amount carried forward</i> | \$9,354 31 |

| | | |
|--|------------|-------------|
| <i>Amount brought forward</i> | \$9,354 31 | |
| Solder, tin, and lead pipe | 33 77 | |
| Powder, fuse, and dualin | 252 66 | |
| Gaskets, packing, pipe-clay, etc. | 47 36 | |
| Akron pipe, cement, rope, etc. | 55 18 | |
| Shovels, pick-handles, wood, etc. | 147 60 | |
| Hardware and supplies | 89 46 | |
| Matches, etc. | 6 26 | |
| Service caps, etc. | 265 63 | |
| Brass connections, etc. | 640 67 | |
| Cement connections, etc. | 13 80 | |
| Iron, etc., \$66.31; lumber, etc., \$19.53 | 85 84 | |
| Magnetic battery | 25 00 | |
| | <hr/> | |
| Total for pipe, etc. | | \$11,017 54 |
| Hydrants | \$910 05 | |
| Hydrant boxes, etc. | 21 09 | |
| Hydrant covers, etc. | 288 05 | |
| | <hr/> | 1,219 19 |
| Gates | \$167 20 | |
| Gate-boxes, covers, etc. | 393 94 | |
| | <hr/> | 561 14 |
| | | <hr/> |
| Total MATERIALS for extensions, etc. | | \$12,797 87 |
| LABOR: | | |
| Teaming by Fire Department | \$ 52 62 | |
| Pay-roll | 7,998 34 | |
| Wells | 80 20 | |
| | <hr/> | 8,131 16 |
| | | <hr/> |
| Total CONSTRUCTION account | | \$20,929 03 |

MAINTENANCE.

REPAIRS:

| | | |
|--|----------|-------------|
| Pumping engineer's dwelling | \$134 07 | |
| Shop on Broadway | 106 85 | |
| | <hr/> | |
| <i>Amounts carried forward</i> | \$240 92 | \$20,929 03 |

| | | |
|--|----------|-------------|
| <i>Amounts brought forward</i> | \$240 92 | \$20,929 03 |
| Terminal gate-house, etc. | 28 59 | |
| Sidewalk, etc. | 24 75 | |
| Hydrant stuffing-box, etc. | 26 80 | |
| Troughs, etc. | 16 80 | |
| Truss-work at Prescott Mills | 13 19 | |

Total materials for repairs \$351 05

Pay-roll, labor on hydrants, and general
repairs 781 80

Total REPAIRS \$1,132 85

PUMPING ACCOUNT:

| | |
|---------------------------|------------|
| Materials, Coal | \$4,405 45 |
| Wood. | 298 00 |
| Oil, etc. | 93 03 |
| Gas | 13 26 |
| Hardware | 11 06 |
| Packing | 32 03 |
| Grates | 66 94 |
| Tools, etc. | 60 33 |
| Iron, etc. | 28 34 |
| Pipe, etc. | 17 31 |
| Brooms, etc. | 2 45 |
| Gaskets | 4 55 |
| Tallow | 45 67 |
| Waste | 7 95 |
| Soda ash | 4 06 |
| Gauge-glasses | 5 40 |
| Asbestos | 105 35 |

Total materials \$5,201 18

Amounts carried forward . . \$5,201 18 \$1,132 85 \$20,929 03

Amounts brought forward . . . \$5,201 18 \$1,132 85 \$20,929 03

Labor, Pay-roll 2,534 00

Total PUMPING account . \$7,735 18

Engine-house expenses:

Repairs lightning-rod, \$20 00

Lime, etc. 3 20

23 20

7,758 38

RESERVOIR.

Repairs of screens, etc. . . . \$ 6 72

Repairs of drain 2 70

Repairs of dwelling 54 23

Tools, etc. 10 64

Manure 19 50

Pay-roll 456 25

550 04

Expenses, Ice \$ 3 83

Printing, stationery, etc. 429 44

Stamps, tickets, etc. 85 11

Clerk hire 612 00

Safe 100 00

1,230 38

Salaries 2,945 86

Inspection 1,974 22

Services of City Engineer, and expenses

connected therewith 549 13

Horse-keeping, and repairs of wagon . . 245 90

Telephone 74 79

Furniture, badges, etc. 19 36

Flushing sewers, etc. 38 50

Amounts carried forward \$16,519 41 \$20,929 03

Amounts brought forward \$16,519 41 \$20,929 03

METERS :

| | |
|------------------------------------|------------------|
| Testing apparatus | \$ 40 43 |
| Waste, etc. | 35 88 |
| Foot lathe | 15 00 |
| Cash paid for repairs of meters, | 161 31 |
| Second-hand meters | 76 00 |
| New meters purchased | 3,588 02 |
| Pay-roll, care of meters | 792 74 |
| | <hr/> \$4,709 38 |

Total maintenance \$21,228 79

Total expenditures (not including interest) . . \$42,157 82

WATER-TAKERS.

The whole number of water-takers (which includes each family, shop, store, office, and other place where the city water is used) is as follows:—

| | |
|--|--------|
| In metered premises | 3,027 |
| In all other premises | 8,400 |
| | <hr/> |
| Total number of water-takers | 11,427 |

Water is supplied for the following uses: Families, animals (horses and cows), apothecaries, armories, auction-rooms, banks, bar-rooms, bath-rooms, barber shops, bakeries, bill-poster, billiard-rooms, binderies, boiler-works, bonnet bleachery, brass-finisher, bowling

alley, boat-house, bleacheries, blacksmith-shops, bottlers, building purposes, cemeteries, churches, coal-yards, county jail, county court-house, city hall, city stable, club-rooms, chess-room, dentists' rooms, dye-houses, eating-houses, foundries, grist-mill, gardens, galvanized iron works, halls, homes, orphanages and asylums, hotels, holly-tree inns, hospitals, hot-houses, horse-railroad stable, ice-houses, laboratory, laundries, licensed victuallers and inn-holders, letter cutting, markets (meat and fish), marble works, masonic temple, machine-shops, machine printing, also for manufactories as follows:— belt, bobbin, beer, box, cap, carriage, clothing, cigar, cologne, confectionery, card-clothing, coffee-mill, cartridges, cop tubes, curtain fixtures, coffin, cloak, cider, comforter, croquet, drain pipe, felting, file, furniture, felt roof, glove cleaning, glove, hosiery, harnesses (loom and carriage), hat, jack-screw, organ, patent medicine, pattern-makers, paper box, paper bag, pickle, pistol, picture frame, machine knife, sausage, set-screw, scale, stamp, soap, suspender, strap, shuttle, shoe-jack, soda, shirt, sash and blind, spring, shoe, wire goods, woolen goods, worsted yarn, wooden ware, and for other purposes as follows:— old ladies' home, offices, pork-packers, public libraries, post-office, print-works, police-station, police court rooms, photograph galleries, planing mills, plaster works, reading rooms, lodging rooms, rail-rooms, viz. depots, car-houses, engine-houses, rectifiers, roll-coverers, stand-pipes, shops, slaughter-

houses, stone-yards, school-houses saloons, stables, steam fire engine-houses, and hook-and-ladder houses, tanneries, trunk-maker, wood-yards, undertakers, young women's home.

The number of abatements made during the year is 952; amount \$10,190.22, to wit:—

| ON WATER RATES OF | 1876. | 1877. | *1878. | 1879. | TOTALS. |
|---|--------|---------|------------|------------|-------------|
| For vacant premises | | \$6 62 | \$250 36 | \$951 10 | \$1,208 08 |
| For changes to metered rates | | | 93 79 | 6,269 43 | 6,363 22 |
| For hose disconnected | | | | 281 37 | 281 37 |
| For persons less | | | 3 33 | 114 03 | 117 36 |
| For animals | | | 3 33 | 167 67 | 171 00 |
| For wrong charges | | | 4 00 | 201 08 | 205 08 |
| For allowances | | | 19 12 | 324 17 | 343 29 |
| For changes in fixtures | | | 9 33 | 198 13 | 207 46 |
| For accounts transferred, | | | 450 00 | 110 18 | 560 18 |
| For deposits by masons | | | 54 | 34 84 | 35 38 |
| For fee returned | \$2 00 | | | | 2 00 |
| For metered water | | 11 70 | 156 49 | 406 42 | 574 61 |
| Total on water rates | \$2 00 | \$18 32 | \$990 29 | \$9,058 42 | \$10,069 03 |
| For service-pipe and sundries | | 17 20 | 26 03 | 9 46 | 52 69 |
| For meters returned | | | | 68 50 | 68 50 |
| Totals | \$2 00 | \$35 52 | \$1,016 32 | \$9,136 38 | \$10,190 22 |

In closing this report, I desire to express my personal obligations to the President and members

of the Water Board, for their uniform courtesy and support in the discharge of my duties; also to the clerk of the Board, for his kind assistance and co-operation; and particularly to Daniel D. Fraser, who, with his long experience and perfect familiarity with the details of the outside work of the department, has been of invaluable assistance to me from the commencement of my official duties in this department.

Respectfully submitted,

HORACE G. HOLDEN,

Superintendent.

SCHEDULE NO. 1.

Charges for Water by Months, from commencement to Dec. 31, 1879.

| MONTHS. | 1873. | 1874. | 1875. | 1876. | 1877. | 1878. | 1879. |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| January | . | \$ 363 94 | \$ 418 96 | \$ 150 45 | \$ 126 51 | \$ 169 13 | \$ 282 44 |
| February | . | 35 33 | 235 43 | 238 25 | 86 84 | 144 38 | 238 19 |
| March | \$ 6,124 94 | 50,200 10 | 65,417 68 | 82,249 51 | 80,177 52 | 82,225 43 | 80,603 69 |
| April | 785 89 | 1,739 56 | 935 20 | 265 34 | 584 11 | 1,970 12 | 9,242 84 |
| May | 3,988 16 | 3,274 09 | 2,147 96 | 874 47 | 1,819 65 | 1,121 43 | 2,751 35 |
| June | 5,818 78 | 2,865 86 | 2,987 43 | 4,460 91 | 2,389 52 | 3,903 69 | 6,126 40 |
| July | 4,833 52 | 1,889 03 | 1,926 31 | 582 68 | 3,147 78 | 1,261 24 | 1,213 13 |
| August | 2,728 30 | 498 50 | 449 86 | 771 87 | 799 88 | 677 01 | 563 35 |
| September | 2,827 07 | 3,245 06 | 865 90 | 495 97 | 3,943 90 | 4,998 07 | 6,584 86 |
| October | 9,729 05 | 872 10 | 2,947 93 | 4,893 44 | 543 79 | 663 80 | 454 29 |
| November | 761 21 | 634 03 | 573 35 | 1,445 65 | 518 72 | 1,220 27 | 1,405 89 |
| December | 1,571 72 | 3,689 79 | 3,955 59 | 3,246 39 | 4,040 71 | 4,522 75 | 5,794 77 |
| Totals | \$39,168 64 | \$69,307 39 | \$82,861 60 | \$99,674 93 | \$98,178 93 | \$102,877 32 | \$115,261 20 |
| Less abatements to date | . | 1,872 83 | 640 06 | 8,185 88 | 2,496 65 | 4,297 77 | 9,058 42 |
| Net amounts | \$39,168 64 | \$67,434 56 | \$82,221 54 | \$91,489 05 | \$95,682 28 | \$98,579 55 | \$106,202 78 |

SCHEDULE No. 2.

Showing Sizes and Lengths of Pipe laid in the Extension of the Works, for the year ending Dec. 31, 1879.

| STREETS. | BETWEEN WHAT STREETS. | LENGTH IN FEET. | | | | |
|--|--|-----------------|------------|------------|------------|--------|
| | | 12 inch. | 8 inch. | 6 inch. | 4 inch. | Total. |
| Aiken . . . | Northeasterly from Cheever . . . | .. | .. | .. | 51 | 51 |
| Beech . . . | Third and Sixth | .. | .. | .. | 75 | 75 |
| Bowers . . . | Salem and Fletcher | .. | .. | .. | 277 | 277 |
| Bowers . . . | Fletcher and Mt. Washington . . . | .. | .. | 339 | .. | 339 |
| Brooks Place, | Easterly from Willie | .. | .. | .. | 161 | 161 |
| C | Westerly from Powell | .. | .. | 280 | .. | 280 |
| Cheever . . . | Aiken and Tucker | .. | .. | .. | 250 | 250 |
| Chelmsford . | Southerly from Cambridge . . . | 90 | .. | .. | .. | 90 |
| Dutton . . . | Extended westerly to Willie . . . | 303 | .. | .. | .. | 303 |
| Dutton . . . | Fletcher and Western Canal . . . | .. | .. | .. | 123 | 123 |
| Eaton . . . | Lincoln and London | .. | .. | .. | 239 | 239 |
| Fay | Easterly from Gorham | .. | .. | .. | 733 | 733 |
| Gorham . . . | Burial Ground No. 2, and Edson Cemetery | .. | .. | 1,959 | .. | 1,959 |
| Green | George and Central | .. | .. | .. | 354 | 354 |
| Griffin . . . | South Whipple and Agawam . . . | .. | .. | .. | 275 | 275 |
| Grove | Manahan and Dover | .. | .. | 33 | 499 | 532 |
| Hampshire . | Northerly from Hildreth | .. | .. | 187 | .. | 187 |
| Jewett . . . | Extended northerly | .. | .. | 50 | .. | 50 |
| Kinsman . . . | Whipple and Floyd | .. | .. | .. | 100 | 100 |
| Lincoln . . . | Tanner and River Meadow Brook, | .. | .. | 178 | .. | 178 |
| <i>Amounts carried forward</i> | | 393 | .. | 3,026 | 3,137 | 6,556 |

SCHEDULE No. 2. — CONTINUED.

*Showing Sizes and Lengths of Pipe laid in the Extension of the
Works, for the year ending Dec. 31, 1879.*

| STREETS. | BETWEEN WHAT STREETS. | LENGTH IN FEET. | | | | |
|----------------|--|-----------------|------------|------------|------------|--------|
| | | 12 inch. | 8 inch. | 6 inch. | 4 inch. | Total. |
| | <i>Amounts brought forward</i> | 393 | .. | 3,026 | 3,137 | 6,556 |
| London . . . | Southeasterly from Eaton . . . | .. | .. | 68 | .. | 68 |
| Lundberg . . | Easterly from Pihl | .. | .. | .. | 137 | 137 |
| Main . . . | London and Plain | .. | .. | 751 | .. | 751 |
| Manahan . . | Extended southerly to Grove . . | .. | .. | .. | 122 | 122 |
| Mansur . . . | Extended easterly from Levi Sprague's place | .. | .. | 132 | .. | 132 |
| Merrill . . . | Concord River and Lawrence . . | .. | .. | .. | 291 | 291 |
| Mill . . . | Central and Lawrence | .. | .. | 392 | .. | 392 |
| Olive . . . | Westerly from Gorham | .. | .. | .. | 386 | 386 |
| Pine . . . | Stevens and Robbins | .. | .. | 491 | .. | 491 |
| Pihl . . . | Fay and Lundberg | .. | .. | .. | 260 | 260 |
| Plain . . . | Northwesterly from Main . . . | .. | .. | 58 | .. | 58 |
| Princeton . . | Westerly from Porter | .. | .. | 80 | .. | 80 |
| Porter . . . | Northerly from Princeton . . . | .. | 164 | .. | .. | 164 |
| Powell . . . | Chelmsford and Smith | .. | 1,432 | .. | .. | 1,432 |
| River . . . | Extended northwesterly to old Town line | .. | 1,536 | .. | .. | 1,536 |
| Robbins . . | Northerly from Pine | .. | .. | 38 | .. | 38 |
| Rolfe . . . | Northerly from Broadway . . . | .. | .. | .. | 30 | 30 |
| Seventh ave. . | Northeasterly from Mammoth . . | .. | .. | 244 | .. | 244 |
| Shedd's ave. . | Extended easterly to Bridgestreet, | .. | .. | .. | 112 | 112 |
| | <i>Amounts carried forward</i> | 393 | 3,132 | 5,280 | 4,475 | 13,280 |

SCHEDULE NO. 2.—CONCLUDED.

Showing Sizes and Lengths of Pipe laid in the Extension of the Works, for the year ending Dec. 31, 1879.

| STREETS. | BETWEEN WHAT STREETS. | LENGTH IN FEET. | | | | |
|--|---------------------------------|-----------------|------------|------------|------------|---------|
| | | 12 inch. | 8 inch. | 6 inch. | 4 inch. | Total. |
| | <i>Amounts brought forward</i> | 393 | 3,132 | 5,280 | 4,475 | 13,280 |
| Smith . . . | Powell and Liberty | .. | .. | 592 | .. | 592 |
| Swift . . . | Whipple and Chase | .. | .. | 143 | .. | 143 |
| Taylor . . . | Lawrence and Merrill | .. | .. | .. | 109 | 109 |
| Tucker . . . | Cheever and Hall | .. | .. | .. | 261 | 261 |
| Wannalancit, | Oliver and Pawtucket | .. | .. | 337 | .. | 337 |
| West . . . | Fulton and Pleasant | .. | .. | 292 | .. | 292 |
| Westford . . | School and Coral | .. | 378 | .. | .. | 378 |
| West Sixth . | Coburn and West | .. | .. | 267 | .. | 267 |
| West Sixth . | Westerly from West | .. | .. | 126 | .. | 126 |
| Willie . . . | Dutton and Cushing | .. | 250 | 10 | .. | 260 |
| Wyman . . . | Easterly from Nesmith | .. | .. | 240 | .. | 240 |
| Hydrants . . | . . . . . | .. | .. | 183 | .. | 183 |
| Total in feet | | 393 | 3,760 | 7,470 | 4,845 | 16,468 |
| Pipes laid previous to 1879 | | .. | .. | .. | .. | 303,818 |
| Total in feet January 1, 1880 | | .. | .. | .. | .. | 320,286 |
| Total in miles January 1, 1880 | | .. | .. | .. | .. | 60.66 |

SCHEDULE No. 3.

List of Hydrants set during the year ending Dec. 31, 1879.

| STREETS. | LOCATION. |
|---------------|---|
| *C | Southerly side, 4 feet westerly from Powell street. |
| *Dutton . . | Southerly side, 20 feet easterly from Willie street. |
| *Grand . . . | Easterly side, 13 feet southerly from Middlesex street. |
| *Gorham . . | Westerly side, opposite Lundberg street. |
| *Gorham . . | Westerly side, 136 feet southerly from Spencer street. |
| Green . . . | Southerly side, 172 feet westerly from George street. |
| *Main . . . | Northwesterly side, corner of Plain street. |
| *Mill . . . | Northerly side, 135 feet easterly from Central street. |
| †*Merrimack . | Northerly side, opposite Central street. |
| *Pihl . . . | Westerly side, corner of Fay street. |
| Pine | Northerly side, corner of Robbins street. |
| *River . . . | Northeasterly side, opposite Hugh Green's house. |
| *River . . . | Northeasterly side. |
| *River . . . | Northeasterly side. |
| *Smith . . . | Westerly side, opposite Shaw Stocking Company's mill. |
| Taylor . . . | Northerly side, 4 feet westerly from Merrill street. |
| *Tucker . . | Sontheasterly side, 243 feet northeasterly from Cheever st. |
| *West . . . | Northwesterly side, near corner of West Sixth street. |

* Old pattern of flush hydrant replaced by new post hydrant.

† Post hydrants.

SCHEDULE No. 4.

List of Stop Gates set for the year ending Dec. 31, 1879.

| STREETS. | LOCATION. | 12 | 8 | 6 | 4 |
|----------------|--|-------|-------|-------|-------|
| | | inch. | inch. | inch. | inch. |
| Aiken . . . | 14 feet n'westerly from s'easterly side of Aiken st., 38 feet n'easterly from n'easterly line of Cheever st., | | | | 1 |
| Bowers . . . | 13½ feet northerly from south line of Bowers st , 8½ feet westerly from west line of Salem street, | | | | 1 |
| Bowers . . . | 13 feet northerly from south line of Bowers street, 3½ ft. easterly from east line of Mt. Washington st., | | | 1 | |
| Brooks Place . | 23 feet southerly from north line of Brooks place, 3 feet easterly from east line of Willie street, | | | | 1 |
| C | 10 feet northerly from south line of C street, 2 feet westerly from west line of Powell street, | | | 1 | |
| Eaton . . . | 11 ft. southeasterly from northwest line of Eaton st., On south line of Lincoln street, | | | | 1 |
| Fay | 14 feet northerly from south line of Fay street, On east line of Gorham street, | | | 1 | |
| Griffin . . . | 12 feet southerly from north line of Griffin street, 4½ feet easterly from east line of Agawam street, | | | | 1 |
| Gorham . . . | 16 feet easterly from west line of Gorham street, Opposite Burial Ground No. 2, | | | 1 | |
| Gorham . . . | 17 feet easterly from west line of Gorham street, 2 feet southerly from north line of Carter street, | 1 | | | |
| Grove . . . | 14½ feet southerly from north line of Grove st., 1 foot easterly from east line of Dover street, | | | | 1 |
| Green . . . | 15 feet southerly from north line of Green street, 4 feet westerly from west line of George street, | | | | 1 |
| Mill | 12½ feet northerly from south line of Mill street, 2 feet westerly from west line of Lawrence street, | | | 1 | |
| Olive | 14 feet northerly from south line of Olive street, On west line of Gorham street, | | | | 1 |
| Pine | 15 feet southerly from north line of Pine street, 4 feet westerly from west line of Porter street, | | | 1 | |

SCHEDULE No. 4.—CONCLUDED.

List of Stop Gates set for the year ending Dec. 31, 1879.

| STREETS. | LOCATION. | 12 inch. | 8 inch. | 6 inch. | 4 inch. |
|----------------|---|----------|---------|---------|---------|
| Porter . . . | 27 feet westerly from east line of Porter street, 2 feet southerly from north line of Princeton st., | | 1 | | |
| Powell . . . | 18 feet westerly from east line of Powell street, 6 ft. n'westerly from n'west line of Chelmsford st., | | 1 | | |
| River . . . | About 50 feet west from Thomas Carrol's house, 17 ft. s'westerly from n'easterly line of River st., | | 1 | | |
| Shedd's ave. . | 9½ feet from northerly line of Bridge street, On west line of Bridge street, | | | | 1 |
| Seventh ave. . | 34 feet northerly from south line of Seventh ave., On east line of Mammoth street, | | | 1 | |
| Smith . . . | 16 feet easterly from west line of Smith street, 1 foot southerly from south line of Liberty street, | | | 1 | |
| *Smith . . . | 7 feet westerly from east line of Smith street, Opposite Shaw Stocking Company's mill, | | | | 1 |
| Swift . . . | 9 feet southerly from north line of Swift street, 4 feet westerly from east line of Whipple street, | | 1 | | |
| West Sixth . . | 14 feet northerly from south line of West Sixth st., 20 feet westerly from west line of Coburn street, | | | 1 | |
| Westford . . | 16 feet southerly from north line of Westford st., 11 feet easterly from east line of Coral street, | | 1 | | |
| Willie . . . | 16 feet westerly from east line of Willie street, 18 feet southerly from north line of Cushing st., | | | 1 | |
| Wyman . . . | 19 feet southerly from north line of Wyman street, 1 foot easterly from east line of Nesmith street, | | | 1 | |

* Fire-service.

SCHEDULE No. 5.

Property at Pipe Yard, Jan. 1, 1880.

CAST-IRON PIPE AND SPECIAL CASTINGS.

| DIAMETER IN INCHES | 4 | 6 | 8 | 12 | 16 | 20 | 24 | 30 | 10 |
|---|----|----|-----|----|----|----|----|----|----|
| Lengths | .. | .. | 111 | 82 | 12 | 21 | 10 | 15 | .. |
| Cut pieces, total length in feet. | .. | .. | 20 | 25 | .. | 60 | .. | 32 | .. |
| Curves, total number | 4 | 4 | 9 | 8 | 1 | 12 | 6 | 6 | .. |
| Sleeves, " " | 17 | 22 | 20 | 4 | 2 | 2 | 10 | 5 | 6 |
| Half Sleeves, " " | .. | .. | .. | 17 | 4 | 14 | .. | 6 | .. |
| Caps, " " | 6 | 1 | 34 | 16 | 4 | 1 | 1 | .. | .. |

| | 4x4 | 4x6 | 6x6 | 6x8 | 6x12 | 6x16 | 8x8 | 8x10 | 8x12 | 10x12 | 12x12 | 12x16 | 16 |
|---------------------|-----|-----|-----|-----|------|------|-----|------|------|-------|-------|-------|-----|
| 4-Ways, | 6 | .. | 9 | 6 | 8 | 1 | 6 | 1 | 2 | ... | 2 | 2 | 1 |
| Reducers, | .. | 3 | .. | 6 | 6 | .. | .. | 1 | .. | 3 | ... | 3 | ... |
| 3-Ways, | 1 | .. | 1 | 5 | 5 | 1 | 7 | .. | 9 | ... | 1 | ... | ... |

Wrought-Iron Pipe.—50 feet $\frac{1}{4}$ -inch pipe, 50 feet $\frac{1}{2}$ -inch pipe, 550 feet $\frac{3}{4}$ -inch pipe, 500 feet $\frac{3}{4}$ -inch second-hand pipe, 300 feet 1-inch pipe, 50 feet $1\frac{1}{2}$ -inch pipe, 180 feet 2-inch pipe. One post hydrant, 1 flush hydrant, 17 hydrant-box covers, 13 hydrant-box frames, 1 hydrant box, 2 4-inch stop gates, 3 gate-box frames, 3 gate-box covers, 6 gate covers, old style, 15 gate boxes. **Lead Connections.**—2 1-inch, 8 $\frac{3}{4}$ -inch, 18 $\frac{5}{8}$ -inch, 1 1-inch for cement pipe, 3 $\frac{5}{8}$ -inch for cement pipe. **Corporation Cocks.**—54 $\frac{3}{4}$ -inch, 2 1-inch, 14 $\frac{5}{8}$ -inch, 9 1-inch for cement pipe, 30 $\frac{3}{4}$ -inch for cement pipe, 12 $\frac{5}{8}$ -inch for cement pipe. **Stop and Waste Cocks.**—23 $\frac{3}{4}$ -inch, 18 $\frac{3}{4}$ -inch, old style, 11 1-inch. **Solder Nipples.**—55 $\frac{5}{8}$ -inch, 13 1-inch, 23 $\frac{3}{4}$ -inch. **Unions.**—42 1-inch, 34 $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ -inch. **Sockets.**—15 $\frac{3}{4}$ -inch, 9 $\frac{5}{8}$ -inch. **Turns.**—3 2-inch, 1 2 to 1 inch, 2 $1\frac{1}{2}$ -inch, 9 1 to $\frac{3}{4}$ -inch, 65 1-inch, 19 1-inch, $\frac{1}{8}$ ton, 43 $\frac{3}{4}$ -inch, 3 $\frac{3}{4}$ to $\frac{1}{2}$ inch. **Plugs.**—36 1-inch, 10 $\frac{1}{2}$ -inch. **Couplings.**—27 reducing brass, 1

2 to 1-inch, 5 1-inch, 3 $1\frac{1}{2}$ -inch, 6 1 to $\frac{3}{4}$ -inch, 12 2-inch, 110 $\frac{3}{4}$ -inch.

Caps. — 7 1-inch, 2 $\frac{3}{4}$ -inch. **3-Ways.** — 7 2 x 1-inch, 5 2 x $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ x $\frac{3}{4}$ -inch, 15 1 x $\frac{3}{4}$ -inch, 1 $1\frac{1}{2}$ -inch, 2 $1\frac{1}{2}$ x $\frac{3}{4}$ -inch, 38 1-inch, 28 $\frac{3}{4}$ -inch, 5 $\frac{1}{2}$ -inch. **4-Ways.** — 1 1 x $\frac{3}{4}$ -inch, 24 1-inch, 73 $\frac{3}{4}$ -inch.

Sundries. — Lumber for 218 sidewalk boxes, 2 derricks, shear pole, $2\frac{1}{2}$ cords hard pine wood, 1 cord logs for blasting purposes, 1 ton stove coal, 1 keg 10^d nails, 350 lbs. iron bolts, 1 keg spikes, 12 pair pipe tongs, 2 pipe-cutters, 2 tapping machines, 1 dry, 728 lbs. steel in drills, 20 lbs. bar steel, 15 assorted gate screws, 2 trowels, 29 iron hydrant valves, 25 rubber packings for hydrant, 3 syphons with pipe attached, 100 feet canvas hose, 1 bundle of sand-bags, 40 lbs. cotton waste, 4 pairs rubber boots, 70 feet rubber hose, 1 iron tube-pump and boring machine, 25 iron lug-straps, 8 rubber connections, 35 lbs. old rubber, 1 fore-plane, 3 iron tooth rakes, 1 grindstone, 3 nail hammers, 2 paving hammers, 2 stone hammers, 6 calking hammers, 10 striking hammers, 2 sledge hammers, 3 large lead ladles, 2 small lead ladles, 7 galvanized iron pails, 3 sets of blocks, 1 fall rope, 6 sling ropes, 4 draught chains, 1 wrapping chain, 270 sidewalk box caps, 2 saw-horses, 2 buck-saws, 2 hand-saws, 60 lbs. lead, 75 lbs. lead pipe cut, 2 coils $\frac{3}{4}$ -inch lead, 2 coils $\frac{3}{8}$ -inch, 2 coils 1-inch, 1 framing square, 1 framing chisel, 2 ice chisels, 2 square-pointed shovels, 22 second-hand shovels, 2 snow-shovels, 20 assorted wooden plugs, 8 lbs. shims and wedges, 5 tool boxes, 1 tin pump, 1 copper suction pump, 1 force pump, 1 zinc pump, 1 hose reel, 1 street combination fountain, 5 fountain dippers, 15 feet fountain dippers' chain, 4 paving planks, 3 paving mauls, 15 feet drain tile, 2 axes, 2 hand-axes, 2 root axes, 10 rammers, $\frac{1}{2}$ bbl. cement, $\frac{1}{2}$ bbl. white clay, 1 dualin pot, 2 lbs. dualin, 50 feet fuse, 6 blasting spoons, 1 apparatus for testing pipe, 1 apparatus for testing meters, 1 bit stock, 1 foot lathe, 9 assorted files, 1 copper goose-neck and brass reducer, 2 water tanks, 1 coal stove, 5 work benches, 25 assorted wrenches, 7 monkey-wrenches, 1 wagon wrench, 3 screw-drivers, 12 bands for main pipe, 1 portable blacksmith forge, 2 sprinkling pots, 4 dies, 3 die-plates, 4 lbs. old brass, 100 lbs. extra brass hinges, 3 soldering furnaces, 2 bbls. charcoal, 1 cement-lining machine, 1 counter scale, 1 platform scale, 13 assorted screens, with fixtures, 1 desk, 20 new pick-handles, 6 iron sidewalk boxes, 50 lbs. solder, 15 lanterns, 3 lead pots, 1 10-gallon kerosene can, 1 8-gallon can, 1 5-gallon can, 1 2-gallon can, 2 1-gallon cans, 4 $\frac{1}{2}$ -gallon cans, 1 2-qt. tin measure, 1 4-qt. wood measure, 4 crowbars, 2 steel prodding bars, 3 nipping bars, 4 soldering irons, 2 iron wood mallets,

4 cane-seat chairs, 1 40-foot leather belt, 34 second-hand picks, 1 set blacksmith tools, 1 blacksmith shop, 1 workshop, 1 carriage house, 1 stable, 1 shed for storage, 1 grain box, 1 horse, 2 harnesses, 1 canvas horse-cover, 1 rubber horse-cover, 2 horse blankets, 2 surcingles, 2 wagons, $\frac{1}{2}$ ton hay, 1 manure fork, 2 hay forks, 1 horse card, 1 curry-comb, 1 brush, 2 dusters, 1 broom, 2 halters, 1 wagon-jack, 600 lbs. wrought iron, 25 lbs. assorted nuts, 5 hanging irons for pipe under bridges, 1 pung, 2 3-foot iron screws, 30 lbs. assorted nuts, 15 wheelbarrows, 1 M. feet good timber, 500 feet boards and planks, 25 M. old lumber, 1 sieve, 1 hoe, 18 calking sets, 4 yarning irons, 6 pipe wedges, 3 spades, 4 pipe vises, 1 bucket for testing meters, 8 cold chisels, 3 bits, 2 portable closets, 2 Worthington meters, $\frac{5}{8}$ -inch, 2 rakes.

Tools at Filter Inlet.

2 iron-tooth rakes, 11 shovels, 1 rammer, 1 axe, 2 ice-chisels, 1 gate wrench, 1 nail hammer, 1 pick, 2 brooms, 1 wheelbarrow.

Tools at Reservoir.

1 grindstone, 2 iron rakes, 3 forks, 6 shovels, 1 sod cutter, 1 axe, 1 saw, 2 hoes, 2 scythes, 2 sneaths, 1 grass hook, 1 wheelbarrow, 1 coil rope, 2 spare screws, 2 thermometers, 1 lantern, 1 snow shovel, 1 iron bar.

Property in Water Board and Superintendent's Office.

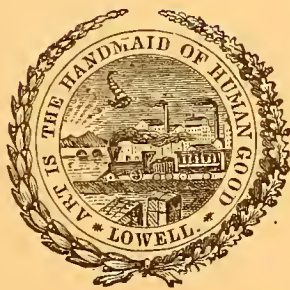
23 chairs, 1 letter press, 2 stools, 3 desks with drawers, 3 standing desks, 3 office tables, 1 book case, 1 clock, 3 thermometers, 5 ink-stands, 1 water cooler, 1 tumbler, 4 maps of Lowell, 1 map of water distributing pipes, 3 waste baskets, 3 mats, 3 hat-racks, 6 spittoons, 9 assorted wrenches, 1 tin match safe, 1 lantern, 12 sticks sealing wax, 1 water gauge, 2 screw drivers, 2 monkey wrenches, 2 files, 2 hydrant dippers, 1 safe, 1 key rack, 3 picks, 1 steel prodding-bar, 1 shovel, 1 atlas of Lowell, 1 atlas of Middlesex County.

Property and Tools at Engine House.

1 vise, 1 work bench, 8 sets brasses for engine, 2 sets differential blocks, 1 piece 2-inch rope, 2 sets fire irons, 1 brass hydrant, 3 axes,

11 wrenches, 2 jack-serews, 1 hand-saw, 26 cold-chisels, 1 ratchet drill, 1 socket drill, 3 calking chisels, 1 barometer, 2 thermometers, 1 water cooler, 1 desk, 1 indicator, 1 oil cupboard, 2 oil dishes, 1 screen for well, 1 platform scale, 4 crowbars, 64 feet $\frac{5}{8}$ -inch chain, 16 eye bolts, 1 truck, 1 key wrench, 1 wrench for air pump, 1 iron wheelbarrow, 2 hand-saws, 1 buck saw, 1 saw horse, 2 gas lamps, 1 high grade thermometer, 4 brass bolts, $1\frac{1}{2}$ -inch diameter, for pump valves, 5 spare pump valves, 5 sets spare weights for valves, 11 socket wrenches, 7 pair gas tongs, 11 finished wrenches Morris engine, 12 finished wrenches Worthington engine, 3 sledge hammers, 12 drills, 1 black walnut cabinet, 9 chains, 2 lengths hose, 6 copper lamps, 4 shovels, 1 floor brush, 100 bolts, assorted sizes, 2 bit-stocks, 3 bits, 1 25-foot ladder, 1 20-foot, 1 8-foot, 1 pair steps, 1 hoe, 2 racks, 1 fore-plane, 3 monkey-wrenches, 100 feet 2-inch rope, 4 chisel bars, 1 small die plate, 6 small taps, 4 finished socket wrenches for Worthington engine, 2 14-quart iron pails, 6 spare rubber valves, 1 clock, 4 hand-hammers, 2 spare rubber valves for air pump, 1 extra set of grates for boiler, 1 grindstone, 1 anvil.

ANNUAL REPORT
OF THE
CITY MARSHAL
OF THE
CITY OF LOWELL,
FOR THE YEAR 1879.



LOWELL, MASS. :

Printed by Campbell & Hanscom, Morning Times, 22 Central Street.
1880.

REPORT.

CITY MARSHAL'S OFFICE, }
LOWELL, NOV. 30TH, 1879. }

To the Honorable the City Council of the City of Lowell.

GENTLEMEN : In accordance with the requirements of the City Ordinances I herewith submit the following report of the doings of the Police Department for the year ending Nov. 30th, 1879, together with such other information as is deemed of interest to your honorable body and our citizens generally.

The entire force of the department comprises fifty-four men, exclusive of the Marshal, and they are divided into day and night squads, and detailed as follows :

WHOLE POLICE FORCE, RANK AND FILE.

1 CITY MARSHAL.
1 DEPUTY MARSHAL.
1 DEPUTY AND CAPT. OF POLICE.
2 SERGEANTS.
2 WARRANT OFFICERS.
2 DETECTIVES.
2 KEEPERS OF POLICE STATION.
8 DAY PATROL.
23 NIGHT PATROL.
8 SUPERNUMERARIES.

NIGHT FORCE.

The night force comprises twenty-eight patrolmen and eight supernumeraries, who are required to report at the police station-house at six o'clock and forty-five minutes in the afternoon, and to remain upon duty until five the following morning, allowing each of them forty minutes for lunch.

DAY FORCE.

The day force consists of fourteen men who report at eight o'clock a. m., and remain until seven o'clock p. m. The office men remain until nine o'clock p. m. During the year the men have been detailed as follows :

Jacob G. Favor, Deputy Marshal ; Harrison H. Fuller and Augustus Weymouth, Warrant Officers ; M. E. McDonald and Daniel M. Hayes, Detectives ; Frank Goodwin, Sergeant, and eight Patrolmen.

MORNING DUTY.

During the year I have filled a vacancy which has always existed ; from the time the captain and the night force leave their duties in the morning until the arrival of the day officers, about two hours, there was no one on duty but one keeper, and he at the sta-

tion house. Now there are four officers on duty on Merrimack, Central and Middlesex streets who can be called as necessity requires.

WORK OF THE DEPARTMENT.

The work performed by the members of the department commenced on the first of December last, that being the commencement of the municipal year. The actual labor performed by the force cannot be fully reported, for the reason that there are hours and days upon cases which result in nothing but labor, and therefore are never reported, but that portion of the labor which has become a matter of record is as follows :

LODGERS.

| | |
|---|-------|
| The whole number admitted for lodging was | 1,997 |
| Of that number there were males, | 1,903 |
| Females, | 94 |
| Foreigners, | 1,681 |
| Americans, | 316 |
| Minors, | 252 |
| Non-Residents. | 1,888 |
| Colored, | 11 |

ARRESTS.

| | |
|----------------------------------|-------|
| The whole number arrested was | 2,559 |
| Of that number there were males, | 2,121 |
| Females, | 438 |
| Foreigners, | 2,095 |
| Americans, | 464 |
| Minors, | 474 |
| Non-Residents. | 468 |
| Colored, | 6 |

CAUSES OF ARREST.

| | |
|--|-------|
| Common Drunkard, | 90 |
| Drunkenness, second offence, | 56 |
| Drunkenness, | 1,456 |
| Assault and battery, | 175 |
| Breaking and entering, | 30 |
| Disturbing the peace, | 33 |
| Larceny, | 209 |
| Safe keeping, | 181 |
| Vagrancy, | 24 |
| Breaking glass, | 8 |
| Unlawfully taking and driving a horse, | 2 |
| Adultery, | 10 |
| Fornication, | 14 |
| Illicit cohabitation, | 4 |
| Obtaining goods by false pretences, | 5 |
| Suspicious persons, | 31 |
| Malicious mischief, | 13 |
| Insane, | 14 |
| Disobedient child, | 24 |
| Embezzlement, | 6 |
| Forgery, | 5 |
| Keeping unlicensed dog, | 2 |
| Doing business on Lord's day, | 4 |
| Keeping liquor with intent to sell, | 3 |
| Violation of liquor license, | 1 |
| Selling liquor Sunday, | 6 |
| Selling liquor to minors, | 2 |
| Unlawful sale of liquor, | 2 |
| Unlawfully removing baggage, | 2 |
| Selling mortgaged property | 1 |
| Lewd and lascivious, | 4 |
| Keeping house of ill-fame, | 2 |
| Unlawfully bathing in city, | 2 |
| Fast Driving, | 3 |
| Truancy, | 35 |
| Playing game in street, | 2 |

CITY MARSHAL.

7

| | |
|---|----|
| Obstructing street, | 12 |
| Wandering about streets, | 6 |
| Allowing a horse to go at large, | 1 |
| Cruelty to a horse, | 4 |
| Escaped prisoner, | 2 |
| Receiving stolen goods, | 3 |
| Evading railroad fare, | 3 |
| Disturbing school, | 5 |
| Delirium tremens, | 3 |
| Bastardy, | 10 |
| Threatening language, | 12 |
| Capias from Superior Court, | 5 |
| Passing counterfeit money, | 3 |
| Peddling without license, | 1 |
| Night walking, | 1 |
| Attempt at larceny, | 2 |
| Defrauding innholder, | 1 |
| Surrendered by bail, | 1 |
| Contempt of court, | 1 |
| Incendiary, | 2 |
| Trespass, | 6 |
| Debt, | 1 |
| Bigamy, | 1 |
| Disorderly, | 2 |
| Unlawfully having in possession a glandered horse, | 1 |
| Giving false answers to Mayor and Aldermen when making application to register, | 1 |

PROSECUTIONS.

The whole number of prosecutions before the police court, for the following offences, 1121.

| | |
|------------------------------|-----|
| Common drunkard, | 90 |
| Drunkenness, second offence, | 56 |
| Drunkenness, | 385 |
| Assault and battery, | 170 |
| Breaking and entering, | 28 |

| | |
|--|-----|
| Larceny, | 162 |
| Vagrancy, | 16 |
| Breaking glass, | 8 |
| Disturbing the peace, | 17 |
| Unlawfully taking and driving a horse, | 1 |
| Adultery, | 7 |
| Fornication, | 13 |
| Obtaining goods by false pretences, | 5 |
| Malicious mischief, | 8 |
| Disobedient child, | 15 |
| Doing business on Sunday, | 4 |
| Forgery, | 5 |
| Incendiary, | 2 |
| Keeping house of ill-fame, | 2 |
| Illicit cohabitation, | 4 |
| Keeping unlicensed dog, | 2 |
| Receiving stolen goods, | 3 |
| Keeping liquor with intent to sell, | 3 |
| Keeping liquor nuisance, | 3 |
| Violation of liquor license, | 1 |
| Selling liquor to minor, | 2 |
| Unlawful sale of liquor, | 2 |
| Selling liquor on Sunday, | 6 |
| Obstructing Street, | 4 |
| Truancy, | 35 |
| Playing game in Street, | 2 |
| Wandering about Streets, | 6 |
| Discharging Fire Arms in City, | 2 |
| Evading Railroad Fare, | 3 |
| Disturbing School, | 5 |
| Bastardy, | 5 |
| Embezzlement, | 6 |
| Threatening Language, | 13 |
| Removing Baggage, | 3 |
| Lewd and Lacivious, | 4 |
| Cruelty to a Horse, | 1 |
| Allowing Horse to go at Large, | 1 |
| Selling Mortgaged Property, | 1 |
| Peddling without a License, | 1 |

CITY MARSHAL.

9

| | |
|---|---|
| Defrauding Inn Holder, | 1 |
| Attempt at Lareeny, | 2 |
| Wilful Trespass, | 3 |
| Concealing Mortgaged Property, | 1 |
| Giving False answers to Mayor and Aldermen when making application to register, | 1 |
| Unlawfully having in possession a Glandered Horse, . | 1 |

NOT GUILTY AND DISCHARGED.

The whole number found not guilty and discharged. for the following offences, was 23.

| | |
|--|----|
| Assault and battery, | 13 |
| Lareeny, | 3 |
| Obtaining goods by false pretences, | 1 |
| Threatening language, | 1 |
| Cruelty to a horse, | 1 |
| Malefious mischief, | 1 |
| Vagabond, | 1 |
| Selling liquor Sunday, | 1 |
| Unlawfully having in possession a glandered horse, . | 1 |

CITY ORDINANCE CASES.

The whole number of city ordinance cases, for the following offences, 50.

| | |
|--|----|
| Truancy, | 35 |
| Wandering about streets, | 4 |
| Obstructing Streets, | 4 |
| Playing Game in Street, | 2 |
| Allowing Horse to go at Large, | 1 |
| Unlawfully Bathing, | |
| Discharging Fire Arms, | 2 |

ORDINANCE CASES REPORTED.

| | |
|---|-------|
| Defective streets and sidewalks, | 275 |
| Defective Lamps and Burners, | 1269 |
| Defective Cess-pools, | 10 |
| Defective Hydrants, | 2 |
| Obstructions removed from streets and sidewalks . . . | 90 |
| Assisted Home Drunk, | 1,032 |
| Disturbances quelled without arrest, | 1,178 |
| Drains. Vaults, and Nuisances Reported, | 29 |
| Lost Children returned to parents, | 53 |
| Stray Teams put up at stables, | 34 |
| Store Doors found Open, and secured, | 52 |

CONVICTIONS.

Of the above named prosecutions eleven hundred and twenty-one were convicted, and twenty-three were acquitted.

STOLEN PROPERTY REPORTED.

The amount of property reported as stolen was \$5,182.35.

PROPERTY RECOVERED.

The amount of property recovered and returned to the owners was \$3,505.00.

A large majority of the petty larcenies were committed by persons who gave but very little if any evidence of being experts, as professional thieves ; many of whom not only claimed to be residents of the city, but were in destitute circumstances, in consequence of not being able to obtain employment. By examining the

statistics in the report that relates to stolen property, it will be seen that the efficiency of the force during the past year is equally as good as that of any previous year.

MONEY TAKEN FROM PRISONERS.

The amount of money taken from prisoners when arrested and returned to them when convicted or discharged was \$4,648.13.

FEES EARNED.

Amount earned by warrant officers is \$4,021.11.

DISCHARGES FROM THE DEPARTMENT.

During the year there have been discharged from the police force the following named :

✓ ALFRED DAY,
AUGUSTUS B. FOSS,
EDWARD STOCKMAN,
GEORGE DAVIS,

ANDREW BLOOD,
HENRY GARRISON,
BENJAMIN G. MOONEY,
SIMON B. HARRIS—Tie Vote. ✓

PROMOTIONS AND APPOINTMENTS.

The following were promoted from supernumeraries :

AUGUSTUS WEYMOUTH,
JAMES HADLEY,
DANIEL D. DRISCOLL,
DANIEL W. LANE,

WILLIAM B. JONES,
EDWARD LOVELL,
JOHN C. FURLONG,
JOHN L. STEVENS,

DANIEL A. WALKER.

Supernumeraries.

| | |
|--------------------|-------------------|
| THOMAS F. RING, | JAMES McNABB, |
| JOHN C. BLOOD, | JAMES A. McQUADE, |
| LAWRENCE ROARKE, | JOHN C. COX. |
| CORNELIUS COLLINS. | |

TEMPORARY SUSPENSIONS.

The following named were temporarily suspended :

THOMAS WALSH, drunkenness while upon duty.

LAWRENCE ROARKE, " " " "

LEVI BROWN, for neglect of duty.

JAMES P. HADLEY, for loaning his badge.

DETECTIVES.

The specific work of detectives is mingled with other office work, such as serving warrants, serving specified hours at Marshal's office, and performing other duties assigned them by the marshal. Of the number of cases assigned them for investigation a very gratifying proportion of them have met with successful results. Even cases of four years standing have been worked to success, and the parties are serving long terms in the State Prison; and but few cases were reported that yet remain a mystery as to origin or who were the perpetrators. During the year past the office force has been detailed to patrol duty Sundays, results have shown that the plan has been the means of putting a stop to a certain extent to disorderly conduct on

the streets, insulting ladies, &c., thus showing that officers in citizens' clothing have been serviceable in preventing offences which street loafers commit as soon as they are assured that the back of an officer in uniform is turned.

It will be seen by reference to the yearly report that the total number of arrests made within the year is 2549, being a decrease of 159 as compared with the report of the previous year. This decrease is accounted for in a measure by the thoroughness of the force in its efforts to prevent crime, and by its success in bringing offenders to speedy punishment. The real responsibility is in preserving peace and good order within our limits, the efficiency of the police force being best shown by the safety of life and property, and the absence of riotous demonstrations and the higher grades of crime, as well as promptness in the arrest of offenders. Defects in the police force are more easily seen than corrected; while there may be room for improvement in the force yet in the main its members are laboring faithfully in the discharge of duty.

LICENSE LAW.

This part of the police business has been looked after by the force. In my opinion the public welfare does not require that officers should be specially detailed for this purpose, as violations of this, as well as other laws, should be attended to by the regular police force.

There were seventeen prosecutions for violations under this law, and some three hundred and sixty places licensed. During 1878 there were about two hundred and nineteen places licensed, and thirty-one prosecutions, which cost the city about thirty-five hundred dollars, and kept three men for this special business. Therefore it will readily be seen that the law has been equally if not better enforced than in any previous year.

FIRE DUTY.

With the very excellent fire department of Lowell but few calls have been made upon the police for fire duty. A regulation of the department requires police attendance at fires. Fortunately no very extensive fires have taken place during the year requiring police work. The most satisfactory relations exist, and I trust will continue to exist between these two branches of the city's service.

NUMBER OF GAS LIGHTS.

The number of lights which came under the police department as regards to the putting out of the same, was seven hundred and thirty-eight. There were forty-three new lights put in this year, and I am pleased to state that with the assistance of Captain Goodhue we have been able to reduce the cost for lighting the city from \$9,296.54 in 1878 to \$6,810.24 in

1879; being a saving of \$2,486.30 for the same number of months. This has been done by having regular hours for putting them out.

TELEPHONE.

During the year the Board adopted the telephone instrument. The line was completed and put into operation, and now connects with the Mayor's office and City Farm, and I find its use to be of great benefit to the Department in all its requirements.

TRAMPS.

The number of persons applying for lodgings at the police station during the year has been nineteen hundred and ninety-seven. The great proportion consists of what are commonly called "tramps." This subject has been thoroughly agitated and discussed, but as yet no satisfactory remedy has been provided.

I have endeavored to conduct the department with a view to economy as well as efficiency, and as a result the expenses have been kept well within the appropriation, notwithstanding the expressed opinion that the expenses of this year would exceed the appropriation. In estimating the amount needed for the Police Department no exact basis can be adopted. Economy should be heeded and practised, but care

exercised that in no way is the efficiency of the department impaired.

CONCLUSION.

In submitting my Annual Report I desire to express my thanks to His Honor the Mayor and also to the other members of the City Government for the courtesy extended through the year. My thanks are also due to the heads of other departments of the City Government for the courtesy extended to me in transacting business with them. To His Honor the Judge and Clerk of the Police Court I am deeply indebted for wise and valuable counsel; my official position has rendered it necessary for me often to advise with them, and they have in all cases cheerfully aided me in the discharge of my duties.

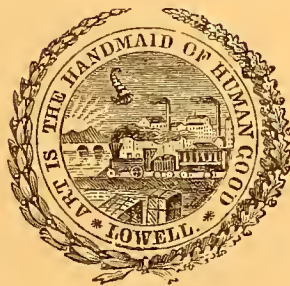
I desire to express my thanks to my Assistant Marshal, Captain, Sergeants, the day and night patrolmen, for the prompt and faithful manner in which they have performed their duties during the past year. In discharging the important duties and trusts imposed upon me, I have been guided solely by the desire to subserve the best interests of the City at large, and I hope that the work of the department during the past year will meet the approval of your Honorable body and of the citizens of Lowell.

Respectfully submitted,

ALBERT PINDER,

City Marshal.

ANNUAL REPORT
OF THE
CITY SOLICITOR
OF THE
CITY OF LOWELL,
FOR THE YEAR ENDING FEBRUARY 29, 1880.



LOWELL:
LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, April 13, 1880.

Read and sent to the Common Council.

SAMUEL A. MCPHETRES, *City Clerk*.

IN COMMON COUNCIL, April 13, 1880.

Received and read.

DAVID CHASE, *Clerk*.

REPORT.

CITY SOLICITOR'S OFFICE, }
February 28, 1880. }

TO THE CITY COUNCIL:

GENTLEMEN—In obedience to the requirements of the ordinances, I have the honor to submit a report of the business of this office for the past year.

At the beginning of the year the following actions in which the city was a party were pending:

William Manning *v.* City of Lowell.

Patrick Murphy *v.* City of Lowell.

Margaret Murphy *v.* City of Lowell.

Emery & Nute *v.* City of Lowell.

Alden B. Ranlett *v.* City of Lowell.

David J. Cheney *v.* City of Lowell.

Alfred J. Livingston *v.* City of Lowell.

John F. Manahan *v.* City of Lowell.

John M. Pevey *v.* City of Lowell.

I append a brief statement of the facts in regard to the foregoing cases and of the proceedings which have been had in relation thereto:

1. MANNING v. LOWELL.

When my last report was submitted this case was before the justice who presided at the trial of the same awaiting the allowance of the plaintiff's exceptions, a verdict in favor of the city having been rendered by the jury by direction of the court. The exceptions having been since allowed, the case was argued before the Supreme Judicial Court and no decision has yet been rendered.

The action was for damages to the plaintiff's estate on Broadway, caused by the alleged action of the city in cutting off an ancient water course, and for other injuries thereto, occasioned by the construction of a sewer through Broadway.

At the argument the plaintiff abandoned all claim for damages occasioned by the building of the sewer.

2. PATRICK MURPHY v. CITY OF LOWELL.

3. MARGARET MURPHY v. CITY OF LOWELL.

The plaintiff, Patrick, alleged that his house was damaged by stones thrown from the blasts in the ledge while the city was engaged in excavations for the sewer in Suffolk street, and that the workmen were careless. He also claimed that his wife was injured by such blasting operations whereby he lost her services.

The plaintiff, Margaret, claimed damages for personal injuries received by being struck by stones from one of the blasts, whereby she was for a long time rendered unable to work and her health permanently impaired.

The cases were tried in March, when the jury disagreed. They were tried again in June, when the jury rendered a verdict in each case in favor of the

city. The plaintiffs took exceptions, which were argued in January last. These exceptions have been over-ruled by the Supreme Court and judgment ordered on the verdict in favor of the city.

4. EMERY & NUTE v. CITY OF LOWELL.

Since my last report was made the above case, which was then pending before the Supreme Judicial Court, has been decided in favor of the city.

The facts were as follows: The plaintiffs, who were proprietors of the Merrimack House in 1876, applied to the Mayor and Aldermen for a license to sell liquors, which was granted, but, before it was issued, the board increased the license fee from two hundred dollars, the price at which it had been originally fixed, to one thousand dollars. The plaintiffs having, before the vote was passed raising the price, tendered two hundred dollars to the City Treasurer and demanded his license, which, at that time, had not been signed, subsequently paid the larger sum under protest and brought suit to recover the difference. The Supreme Court decided that the board could change the license fees at any time before a license for that special class was issued, and that, even if it were otherwise, plaintiff could not recover back money paid by him voluntarily, though such payment was made with protests.

5. RANLETT ET AL. v. CITY OF LOWELL.

This case was also pending in the Supreme Judicial Court at the date of my last report. It was an action for damages occasioned by the neglect of the city in not cleaning out the sewer in Dutton street, whereby the plaintiff's cellar, which connected with the sewer

by a drain, was overflowed, and his goods therein destroyed. As the plaintiff did not show any license from the Mayor and Aldermen to connect his cellar with said sewer by means of a drain, the court below was requested to rule that he could not recover. The court so ruled, and the Supreme Court, before which the case was carried by plaintiff, on exceptions, has sustained the decision of the court below, and judgment on the verdict has been entered for the city.

6. CHENEY v. LOWELL.

This was an action for damages occasioned by a defect in Worthen street. The plaintiff, who had lost an arm in the war of the rebellion, fell upon ridges of ice and was injured. It happened that the city had been negligent in not cleaning the walk, and that repeated complaints had been made to the authorities of its condition. The jury gave the plaintiff fifteen hundred dollars damages, which have been paid.

7. LIVINGSTON v. LOWELL.

This is a petition to the Superior Court for a jury to assess the damages to the petitioner by reason of the widening of Chelmsford street, and has not yet been heard.

8. MANAHAN v. LOWELL.

This was a petition for a jury to assess damages sustained by petitioner, by reason of the laying out of Gove street. Subsequent to the filing of the petition, the city, by resolution, adjusted the claim.

9. PEVEY v. LOWELL.

This is a petition to the County Commissioners to assess the damages to plaintiff's premises on Walker street by the construction of a sewer. It is still pending.

The following actions have been brought against the city during the past year:

Pamelia Mercer *v.* City of Lowell.
Samuel Fletcher *v.* City of Lowell.
Sylvia Hussey *v.* City of Lowell.
Catherine McGuane *v.* City of Lowell.
Sarah J. Wilson *v.* City of Lowell.
A. P. Quimby *v.* City of Lowell.
Benjamin Palmer *v.* City of Lowell.
Same *v.* Same.
Charles W. Saunders et al. *v.* City of Lowell.

1. MERCER v. LOWELL.

This is an action for damages occasioned by a defect in the sidewalk on Appleton street. The case was prepared for trial at the December term, but on account of the sickness of the plaintiff it was continued.

2. FLETCHER v. LOWELL.

A suit brought to recover for paving stones sold to the city. As there were quite a number of items in the plaintiff's account the case was sent to an auditor and is still undisposed of.

3. HUSSEY v. LOWELL.

Plaintiff claimed to have been injured by reason of a defect in the sidewalk on Pleasant street. She

alleged that snow and ice had accumulated on the walk, in a rough and uneven manner, whereby she, while walking thereon, was thrown down and severely injured. It was tried before a jury at the last September term of the Superior Court and a verdict was rendered for the city. The plaintiff took no exceptions, and judgment has been entered on the verdict.

4. MCGUANE v. LOWELL.

This was a similar claim. The accident was on Market street and the case has not yet been reached.

5. WILSON v. LOWELL.

An action for damages on account of a defect in the sidewalk on Market street. Not yet reached for trial.

6. QUIMBY v. LOWELL.

Suit to recover for injuries to plaintiff's carriage and horse, occasioned by defect in a street in Pawtucketville, entered at the last term, cannot be in order for trial till the March term.

7. PALMER v. LOWELL.

8. PALMER v. LOWELL.

These were actions brought before the District Court at Ayer. One was in tort for converting certain paving stones belonging to the plaintiff. The other was in contract to recover payment for paving stones alleged to have been sold to the city. The former action was tried and decided in favor of the city, from which no appeal was taken, and the judgment thereon is final. In the other action the city consented to a finding in favor of the plaintiff and appealed to the Superior Court, in which it is now pending.

9. SAUNDERS ET AL. v. LOWELL.

This was a petition to the County Commissioners for a jury to assess the damages occasioned to plaintiff's premises by the laying of a marginal sewer. A jury was ordered, but not yet summoned.

Beside the foregoing civil actions, the city was indicted in the Criminal Court for permitting obstructions to remain in Chelmsford street for a long time after the city had voted to relocate lines of said street. The District Attorney has not called up the case and I very much doubt if it is ever tried, for, in my judgment, the indictment cannot be sustained.

One suit has been brought by the city during the past year.

Mary Muldoon, representing herself to be poor and in necessitous circumstances, was taken to the Alms-house and cared for several months. The Overseers of the Poor discovered that she had money on deposit in one of our Savings Banks but had assigned her bank book, and referred the matter to this office. An action was at once commenced against her, and the Savings Bank and the assignees summoned by trustee process, whereupon, after the suit was entered in court, the parties paid the claim in full with costs, amounting in all to nearly two hundred dollars.

In a communication of this kind to the City Council it is hardly necessary for me to add that the foregoing represents but a small portion of the duties of the Solicitor. The citizens follow with considerable interest the cases in courts in which the city is a party, but can know but little of the other labors of this office. The

City Council, its committees, the officers of the city, have frequent occasion to consult the Solicitor, and he always attends the meetings of the Committee on Claims, which, by patient investigation and good judgment is enabled to save the city much expensive litigation.

I cannot close this my last report of the business of an office to which I have been elected by the unsolicited votes of five successive City Councils, and whose duties I have endeavored to discharge with promptness and fidelity, without recording my obligations to the various officers of the city with whom I have been associated for their uniform kindness and their ready assistance whenever required.

Very respectfully,

GEORGE F. RICHARDSON.

FIFTY-FOURTH

R E P O R T

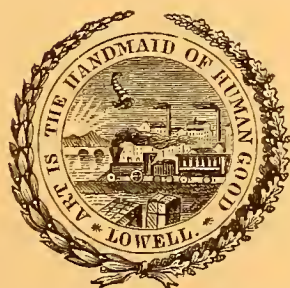
OF THE

OVERSEERS OF THE POOR

OF THE

CITY OF LOWELL.

PUBLISHED BY ORDER OF THE BOARD.



LOWELL, MASS.:

STONE, BACHELLER & LIVINGSTON, PRINTERS.

1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 27, 1880

Read and sent down.

SAMUEL A. MCPHETRES, *Clerk.*

IN COMMON COUNCIL, January 27, 1880.

Received and read.

DAVID CHASE, *Clerk.*

REPORT.

TO THE CITY COUNCIL:

GENTLEMEN—The Overseers of the Poor, to whom is committed a general oversight of the management of the several institutions at the City Farm; the Free Dispensary (a worthy charity created by the City Council of 1879 for the relief of the sick poor); the insane at the State hospitals who are a city charge, and of all charities bestowed for relief and partial support to the unfortunate outside the Almshouse, respectfully submit their report for the year 1879.

SECRETARY'S OFFICE.

For detailed statement of work done and aid rendered from this office as temporary relief and partial support, see Secretary's report herewith submitted.

The duties of this office are at once arduous and perplexing. To administer aid judiciously requires a thorough investigation into the condition and wants of every applicant, to prevent imposition by those who are not actually needy, but who had rather beg than work. And the frequent changes in the settlement laws often render it extremely difficult to determine whether the claimant has a settlement or not, and if so, whether in

Lowell or some other place; and it is of the greatest importance that the question of settlement of every person helped be determined at once; for if they have no settlement in Lowell, either the State or some city or town is liable for their support, if properly notified. A mistake or neglect to notify in time may cost the city hundreds, and perhaps thousands, of dollars annually. For illustration, see the amount collected as per Secretary's report for 1879: From State \$2,149.79; from Cities and Towns \$1,914.41; total, \$4,064.20. It must therefore be seen at a glance that competency, fidelity and a thorough knowledge of the pauper and settlement laws, together with experience in this speciality of work, which can be obtained only by long and constant service, are of the utmost importance in the office of Secretary, and make it desirable that this officer should be but rarely changed.

Lack of employment is the excuse offered for their destitution, by nearly every claimant for the city's bounty. Now, while it is not expected that the city can furnish work to all who are idle, we believe some measure might and should be adopted whereby the deserving poor may be enabled to bridge over their pressing needs, preserve their self-respect, and be prevented from becoming confirmed and willing paupers. Let them once get the impression that they can be supported without work, and they come regularly for their monthly allowance, with the same assurance that any employé of the City goes to the Treasurer for his well-earned pay; nor is this all, for many of them are also receiving aid from the churches, the charitable institutions, and private families and individuals. Thus they have become demoralized,

not so much from any fault of theirs, as from the loose manner in which the various charities are administered.

Now, what is the cure for all this crookedness and abuse? We acknowledge the necessity and *duty* of extending aid in some form to the deserving poor, and believe it should be done in such a way as shall help them to help themselves, rather than to help them abuse all who are charitably disposed. This can be done by giving them employment of some kind, and requiring them to honestly earn the aid furnished, and by having all the charitable institutions work in harmony together, each knowing what the other is doing. Humanity to the poor, and economy in all charities demand it. Various plans have been suggested and considered by the committee, such as graveling the meadows at the City Farm, removing stones from the public streets, sawing wood, &c. To start the experiment with the latter seems the most simple and sure of success.

Let a wood-yard be established in connection with the offices of the Secretary and City Marshal, where every able-bodied man applying for assistance shall be required to earn the aid furnished him, and where every *tramp*, provided with food or lodging, shall be made to labor at least two hours before being allowed to depart. "He that will not work according to his faculty, let him perish according to his necessity: there is no law juster than that."

ALMSHOUSE.

It is a gratifying fact, that the average number of persons supported at the Almshouse during the year 1879, was only one hundred and twenty-seven, a de-

crease of sixteen, from the preceding year. Under the wise and careful management of Superintendent Phelps and his excellent wife (the Matron of the institutions), the Lowell Almshouse has become a model of its kind, and has justly secured that reputation throughout the State.

The actual cost for support of each individual for the present year, has been fifty-six dollars and seventeen and three-fourths cents ($\$56.17\frac{3}{4}$), or one dollar and eight and one-third cents ($\$1.08\frac{1}{3}$) per week—a smaller figure than ever before reached. This includes all repairs on the premises, salaries of officers, clothing for inmates, and cost of lodging and feeding six hundred and thirty tramps during the year.

This small expense for the support of each individual is not the result of parsimony, but of careful and economical management, together with the productiveness of the farm connected with the institutions.

For a detailed statement of farm, stock, buildings, inmates, &c., see lengthy and minute report of Superintendent herewith submitted.

INSANE.

We close the year with forty-six insane persons at the Almshouse, an increase of five during the year.

We are supporting, in addition to the above, thirty in the State hospitals as follows: Fifteen at Danvers, eleven at Worcester, five at Northampton and one at Taunton, making in all seventy-six.

It is becoming a serious question how we shall provide for this ever-increasing class of unfortunate people. The first consideration is, how best to promote

their welfare, and, if possible, to effect their cure. Then comes the question of expense.

It is expected that acute cases of insanity can be cured at the hospitals in a few weeks or months at most; but if the case becomes chronic, the person will probably remain insane through life. Treatment does them no good, and they can be as well cared for in some other way as in the large and *expensive* State hospitals. Dr. Nathan Allen, who has studied this matter thoroughly, and is considered good authority in lunacy, said at a hearing before the Legislative Committee on Charitable Institutions, held at the State House, February 26, 1879: "There is no question but that many patients might from time to time be removed from our hospitals, which would prove advantageous both to them and to those who remain."

Commencing in 1876, we have from time to time removed quite a number of incurable, harmless insane from the State hospitals to our Almshouse, and believe that the change has not been detrimental to their welfare, but has been the means of saving the city several thousands of dollars.

We respectfully call your attention to the necessity of providing better accommodations at the Farm for these people, and recommend that a sufficient sum be appropriated to erect a suitable building sufficient to our local need.

REFORM SCHOOL.

This school, under the management of Mr. William A. Lang, still maintains its former high reputation as an educational and reformatory institution. Under the revised

charter, the School Committee have direct official connection with this school, with authority to prescribe textbooks and studies to be pursued, but the choice of teacher, discipline of the school, care and maintainance of the pupils, are under control of the Overseers of the Poor, to whose appropriation the whole expense is chargeable. This school is considered one of the best in the State, and other cities and towns are continually seeking its benefits for their truants.

For particulars in relation to numbers, terms of sentence, classification, punishment, &c., we refer you to the report of Mr. Lang, Teacher and Chaplain.

FREE DISPENSARY.

At a regular meeting of the Middlesex North Medical Society, held January 31, 1877, Drs. Nathan Allen, Charles A. Savory and F. Nickerson, were appointed a committee to bring the subject of the claims of the sick poor for medical relief to public notice.

In their appeal for means to start the good work, the committee say: "Provision is made in a variety of ways to supply the poor with food, fuel and clothing, but nothing comparatively is done to furnish medicines or medical attendance. While the profession stand ready to *give their services*, it is certainly not asking to much that the public furnish the means. What is indispensable for carrying on this work, are rooms centrally located and furnished with a small stock of drugs, where the poor can call for advice and medicine."

Their original idea seems to have been to depend upon private donations and general contributions, for

they further ask: "Are there not men or women in our city, blessed with means, who will give liberally to this object?" Their appeal met no response in the form of donations or legacies; but June 10, 1879, the City Council passed an ordinance establishing a Free Dispensary for the relief of the sick poor, appropriating a sum not to exceed \$1000 annually therefor, and making it the duty of the Overseers of the Poor to carry the provisions of the ordinance into effect. Our Board immediately secured rooms in the Market House Building, and fitted them up in an economical, yet convenient and suitable manner, for their intended use, at a cost of \$225 for labor and material, which may be called permanent fixtures. We invited the Middlesex North Medical Society to name twelve of its members to act as Dispensary Physicians, who at once submitted the following: Drs. Allen, Bass, Colton, Fisk, Fox, Hoar, Huntress, Irish, Leighton, Parker, Pinkham and H. J. Smith, who were unanimously approved by our Board. A clerk was appointed, a suitable supply of drugs and medicines procured, and September 1st the Free Dispensary was duly opened for business.

The number of patients treated from time of opening to January 1, 1880, was three hundred and twenty-two. Whole number of prescriptions compounded, one thousand two hundred and forty-six. Of these, three hundred and sixty-six were on orders of the City Physician, whose labors and expenses are thus considerably lightened. The whole expense of Dispensary, including fitting-up, clerk's salary, medicines, printing, &c., to January 1st, was eight hundred and eighty-four dollars and ninety-six cents (\$884.96), leaving balance of one hun-

dred and fifteen dollars and four cents (\$115.04), with a fair stock of medicines also on hand with which to commence the new year.

We believe that much good has already been accomplished in relieving the sufferings of the sick poor, and that the Dispensary is the best and cheapest means that can be devised for administering to their wants.

As at present arranged the physicians are the judges of who shall be treated. As they give their services, it seems no more than just that the city should make investigations as to the financial condition of every person claiming treatment, and give certificates to such as are found worthy, and thus prevent abuse of this noble charity.

For organization, rules and manner of carrying on this work, see report of Dr. Huntress, secretary of Board of Dispensary Physicians, accompanying this, in which he makes some suggestions which we think worthy your consideration.

We desire here to express our obligations to the Middlesex North Medical Society, and especially to the corps of Dispensary Physicians, for their generous assistance and cordial coöperation in this good work.

JOHN A. G. RICHARDSON, Chairman,
F. D. MUNN,
GEO. S. CUSHING,
MICHAEL CORBETT,
SULLIVAN L. WARD,
PATRICK CUMMISKEY,
N. C. SANBORN,

Overseers of the Poor.

SECRETARY'S REPORT.

OFFICE OF OVERSEERS OF THE POOR,
LOWELL, January 1, 1880.

To the Board of Overseers of the Poor:

GENTLEMEN—In submitting the report of 1879 from this office, you will see that the number of applications for aid from the city were quite extensive, but the prospect for 1880 looks more encouraging.

Last year, that is in 1878, the State was giving state aid to our city for the relief of our soldiers in the late rebellion, of from one thousand (\$1000.00) dollars to eleven hundred (\$1100.00) dollars per month.

That act was repealed in January, 1879, and it all came on the city until August of the same year. Since August, we have been aiding less families than one year ago corresponding.

Also an act to amend an act of the sixth clause of chapter 190 of the acts of 1878, giving a married woman a settlement, by five years' residence, in a city or town, without regard to a husband that has no settlement within the state.

We have now one hundred and eighty-three persons aided by us at the present time, that, as the law was last year, would otherwise belong to the State or other cities and towns, and find it makes quite a difference

in the expense. I have endeavored to do my duty, promptly and faithfully, for the interest of the city and the poor.

One thousand and thirteen families were aided, including seven hundred and eleven that have settlements in the city, one hundred and ninety-eight having no settlement in the State, and one hundred and four families having acknowledged settlements in other cities and towns, amounting to a total of 3840 persons aided.

The expense to the city for 1879 was \$10,667.80, and the expense to the State was \$2149.79, and the expense to other cities and towns being \$1914.41, and cost to each person \$3.83.

Of the 3840 persons aided, 382 are widows or those that have been deserted by their husbands. There have been seventy-three of these deserted the past year.

| | |
|---|-----|
| Persons sent to the State Almshouse, | 110 |
| Persons committed to State Lunatic Hospitals, | 14 |
| Persons committed to House of Correction, | 43 |
| Permits for burial of paupers, | 147 |
| Orders given on City Physician, | 694 |
| Official notices and letters received, | 455 |
| Notices and letters mailed, | 493 |

Gentlemen, you will please allow me to thank you for your kindness toward me for the last year that I have held office under your authority.

LEONARD F. JEWELL, .

Secretary.

SUPERINTENDENT'S REPORT.

OFFICE OF THE SUPERINTENDENT OF INSTITUTIONS AT CITY FARM,
LOWELL, December 31, 1879.

To the Board of Overseers of the Poor, City of Lowell:

GENTLEMEN — In accordance with the requirements of your rules, and compliance with an ordinance of the City Council, I herewith respectfully submit to you for your consideration and acceptance, my eighteenth annual report, at the close of my twentieth consecutive year of service, to your board as Superintendent of Institutions at the City Farm, endeavoring to show to you the condition of the farm and buildings and of the inmates of the various institutions under my charge, the amount of labor performed by them, the number of them received, discharged and remaining in the institutions at the present time, and the cost of supporting them and the carrying on of the farm, and the value of the crops raised and sold during the year now coming to a close.

FARM.

The farm, as is well known, is a long and irregular piece of land, extending for the most part along the bank of the River Meadow Brook, and comprises about one hundred and twenty acres.

About one-half of the farm is capable of cultivation, there being a gravel ridge extending nearly the whole length through the centre of the farm, and then that portion that borders directly on the River Meadow Brook, being composed for the most part of bog meadows, originally. From time to time these meadows, a portion of them, are reclaimed by removing the muck and filling in with gravel, sand and loam, and made some of the best hay-producing land on the farm. There has been done some of this reclaiming during the past season (a piece of meadow on the west side of the ridge which the water of the brook backs up on to during high water time), and it will probably be continued the next if there is not too much high water in the brook to prevent.

I think that the portion of the farm capable of cultivation is in as good condition as ever before, for the producing of large crops the next season. There has been a large amount of labor done this fall in preparing the land, and at the present time we have a large amount of composts and dressings on hand to use in the spring to enrich the soil.

I have had six acres sown down to grass this fall, and have had two acres more prepared to sow down next spring. I have at the present time about sixteen acres under the plough, preparing for the cereals and garden vegetables to be raised the season coming; also there was about one acre prepared for strawberries, and plants set out, but owing to the nature of the soil and the weather of the past summer and fall and the voracious ravages of the grub worm, I am fearful that we shall not have a large yield of this delicious berry the season coming.

The usual amount of grading has been done on the roads leading to and around the farm to keep them in good passable condition.

Also there has been built five hundred and fifty feet of fence, commencing at the avenue leading to the barns and extending in a southerly direction on the boundary line between the farm and the farm of H. A. & S. A. Coburn adjacent, the labor of building and so forth being done by the inmates and the help employed on the place. The fences on both sides of the main avenue and around the flower garden have been repainted, and I think that the fences and walls are now in good condition for a number of years to come; and I would state here that we have not had that amount of available help among the inmates the past season for the carrying on the farm work as in years past, especially from the boys in the reform school, owing in part, to the introduction of chair-bottoming in the institution, and also to the smaller number of men, than usual sentenced to the workhouse.

BUILDINGS.

The buildings on the farm are situated in about the centre of it, and are accessible by an avenue, connecting the farm with Chelmsford street. They are eleven in number, as follows: almshouse, reformatory, men's and hospital buildings, shoe shop, long shed, two barns, piggery, two-story dwelling house for the teacher of the reform school, and the pest house, which is situated about one hundred and twenty-five rods from the

main buildings in a northerly direction, where patients can be perfectly isolated, if occasion requires it.

There has been no change in any of them during the past year—the usual amount of repairs having been done to keep them in good condition—with the exception of the dwelling house for the teacher, which has been thoroughly repainted, and the introduction of city water into the buildings, which supplies a much needed want. Also in the superintendent's kitchen there has been put in a cooking range and hot water tank, and also a new bath room, &c., for the use of the superintendent and his family.

The cost of the general repairs, improvements, &c., done in the buildings, and the painting of the fences amounts to one thousand five hundred and fifty-nine dollars and eight cents (\$1,559.08), this amount also includes the cost of repairs, and so forth, to the cooking and heating arrangements throughout all the institutions

TOOLS, CARTS, WAGONS, &c.

There has not been any change in the farming tools made during the year, no further than to keep them in good order, but I think that this next season there will have to be some of our haying machines exchanged for new ones, on account of their being nearly entirely worn out.

The wagons have all been repaired and are in good condition, with one exception, and that is the one that is used in the delivering of the orders issued by the secretary to the outside poor, which I think should be sold or exchanged for a new one, it being now in a rather dilapidated condition.

The carts are all now in good condition, especially the two-horse dump carts, an entire new set of wheels having been put on one of them, and a new set of forward wheels, pole, &c., on the other, when, previously, we were obliged to use the wheels of our farm wagons if we desired to use the carts.

The whole expense incurred in the repairs of the carts, wagons, harnesses, farming tools, and so forth, was three hundred and twenty-eight dollars and nineteen cents (\$328.19).

STOCK.

The stock on hand January 1, 1879, was six horses, six cows, and fourteen shoats. During the year there have been twenty-three pigs raised, nine pigs sold, and fourteen fat hogs killed—the dressed weight of which was five thousand and fifty-four pounds—leaving on hand December 31, 1879, six horses, six cows and fourteen shoats.

HELP.

During the year the same number of help have been employed as last year: three men on the farm and one man to deliver the orders of provisions issued by your secretary to the outside poor and to attend to the marketing of the produce raised for market, and two female assistants in the house the whole time, and a third one a portion of the time, when necessary, and they, one and all, have generally given good satisfaction.

CROPS.

After taking all things into consideration, I think that the yield of our staple crops, in the aggregate, are better than in the year previous, though there was a falling off in the amount of some of them, but the increase in some of the others more than made up the difference. The amount of first quality hay harvested was only about three-quarters of that the year previous. The whole amount of hay harvested, of all kinds, was ninety-six tons.

The potato crop did well, though not harvesting as large a crop as usual, but the quality was excellent.

The apple trees did not produce any fruit to amount to anything, it not being the bearing year for them. The pears and grapes did exceptionally; we had the largest yield of pears ever produced on the farm.

The strawberry crop turned out as I expected at the time of my last report; it was a total failure, and I cannot now speak favorably of the bed we have started for next season—reasons for which are previously mentioned in this report.

The amount received for sales of produce raised during the year was two thousand three hundred and ninety dollars and three cents (\$2390.03), which amount is larger than the sales of the year previous by one hundred and eighty-nine dollars and forty-eight cents (\$189.48).

The value of the produce raised was four thousand five hundred and three dollars and thirty cents (\$4,503.30). This amount does not include the value of that which was consumed by the large family of inmates in the various institutions before harvesting time.

SMALL-POX HOSPITAL.

This building remains in the same condition as at the time of my last report. During the year there has not been any occasion for a demand to occupy it. Its contents are preserved in good condition, and it is ready for use, whenever occasion demands it.

ALMSHOUSE.

The number of inmates in the almshouse January 1, 1879, was one hundred and fifty-three—eighty-three males and seventy females; the number admitted during the year was two hundred and sixteen—one hundred and eighteen males and ninety-eight females, making the whole number for the year to be three hundred and sixty-nine—two hundred and one males and one hundred and sixty-eight females.

Of this number there were two hundred and thirty-two discharged—one hundred and thirty-five males and ninety-seven females, leaving the number remaining December 31, 1879, to be one hundred and thirty-seven—sixty-six males and seven-one females. The average number of paupers supported for the year was one hundred and twenty-seven.

Of the number of inmates discharged during the year, twenty-nine died of the following diseases: Six of pneumonia, three of consumption, four of old age, two each of chronic dysentery, debility, heart disease, dropsy, cancer and infantile diseases, and one each of paralysis, epilepsy, tumor and syphilis.

During the year there have been four births in the almshouse.

The number of insane in the almshouse January 1, 1879, was forty-one—thirteen males and twenty-one females. There were admitted forty—twenty-three males and seventeen females, making the whole number to be for the year eighty-one—thirty-six males and forty-five females. Of this number there were discharged thirty-five—twenty-one males and fourteen females; leaving the number remaining December 31, 1879, to be forty-six—fifteen males and thirty-one females. Of the number of insane discharged, four—two males and two females—died. These statistics of the insane are included in those of the almshouse also.

The nativity of those admitted to the almshouse during the year was as follows: One hundred and twenty-two born in America, seventy-two in Ireland, seven each in England and Scotland, four in Canada and one each in Newfoundland, New Brunswick and British West Indies.

The oldest person admitted was eighty-four years old, and the youngest one three weeks. The oldest person in the almshouse is a female; she is one hundred years old.

The ages of those admitted are as follows: four births; under one year of age, twelve; from one to five, twenty-three; from five to ten, twenty-six; from ten to twenty, twelve; from twenty to thirty, thirty; from thirty to forty, twenty-nine; from forty to fifty, thirty-one; from fifty to sixty twenty; from sixty to seventy, eighteen; from seventy to eighty twelve; from eighty to ninety, two.

The average age of those admitted was thirty-one years and two months.

And here, in connection with this subject, I would say that our large family of aged, infirm, insane, and otherwise helpless inmates is constantly increasing in numbers every year, which accounts in a measure for the large number of deaths which occurred during the year; and I would state here that Dr. E. W. Trueworthy has been constant and efficient in his duties in relieving the sick in the institution, for which he has my thanks.

WORKHOUSE.

This is one of the institutions established here, in connection with the almshouse, to receive a class of unfortunate people that are convicted of minor crimes and offences before our Municipal Court, so that the city can have the benefit of their labor as well as having to pay the cost of their support, if sent to the House of Correction at Cambridge.

The number of inmates January 1, 1879, was twelve—four males and eight females. The number committed was eighty-eight—thirty-six males and fifty-two females; making the whole number to be one hundred—forty males and sixty females. Of this number there were discharged ninety—thirty-seven males and fifty-three females; leaving the number remaining December 31, 1879, to be ten—three males and seven females.

The average number for the year was sixteen. Of the number discharged during the year, seven were pardoned.

The commitments were as follows: fourteen males and thirty-five females for drunkenness; five males and

eleven females for drunkenness, second offence; seventeen males for being common drunkards and six females for larceny.

Thirty-seven were committed for thirty days each, nine for forty days, four for two months, twenty-eight for three months, four for four months, and seven for six months. The longest sentence is six months, and the shortest one thirty days. Average sentence of those committed was two months and fourteen days. Average sentence served of those discharged was two months and four days.

There were four committed between the ages of sixteen and twenty; eighteen between twenty and thirty; thirty between thirty and forty; thirty-one between forty and fifty; four between fifty and sixty; one between sixty and seventy. The youngest person committed was sixteen years old, and the oldest one sixty-three. The average age of those committed was thirty-six years.

Of those committed, one was born in Canada, twelve in England, twenty-six in America and forty-nine in Ireland.

Since the establishment of the institution in 1872 there have been six hundred and fifty commitments.

HOUSE OF REFORMATION FOR JUVENILE OFFENDERS.

This is one of the institutions in connection with the Almshouse. I, as superintendent, have but partial direction over it; my duties extending only as far as seeing that the inmates of it are properly cared and provided for; the management and direction of the school

belonging to it being under the charge of the school committee, according to the charter of the city. Its character is still sustained and it is looked upon as one of the model schools of its kind in the country. I am frequently receiving communications from persons interested in such schools, inquiring into the methods used in the governing of it, and other matters pertaining to the reformation of children committed to it.

Mr. William A. Lang still remains as teacher and chaplain, positions to which he has not only educated himself by experience, but has a natural adaptation of faculties to use in governing this class of unfortunate youths that are received into the institution, and instil into their minds that there are higher and better ways for them to travel through life, than the ways they had been travelling before entering into the institution.

The same arrangements continue to exist between the city of Lowell and the several cities and towns that send their tenants to this institution that did at the time of my last report.

For employment they are occupied a portion of the time in bottoming chairs, and some in the garden, during the summer months, but not as much as formerly, not interrupting whatever in the sessions of school.

No change has been made in the method of punishment for the unruly ones, the same rules being observed that were adopted several years since.

The following table gives a list of those that have been confined in solitary during the past year, for what offence and length of time confined:

| | |
|---------------------------------|--------------------------|
| Quarrelling, | 2 in cell 36 hours each. |
| “ | 2 “ “ 48 “ “ |
| Falsehood | 1 “ “ 48 “ |
| “ | 1 “ “ 90 “ |
| Playing in dormitory | 2 “ “ 36 “ “ |
| “ “ workshop | 1 “ “ 36 “ |
| Disobedience | 1 “ “ 36 “ |
| “ | 1 “ “ 60 “ |
| Stubbornness | 2 “ “ 48 “ “ |
| “ | 1 “ “ 24 “ |
| Attempting to abscond | 5 “ “ 60 “ “ |
| “ “ “ | 2 “ “ 80 “ “ |

The number of inmates belonging to the school January 1, 1879, was thirty-eight—thirty males and two females from Lowell, four males from Chelsea, and one each from Somerville and Woburn. There were admitted during the year sixty-one—fifty males from Lowell, eight from Chelsea, and one each from Everett, Woburn and Stoneham, making the whole number for the year to be ninety-nine—eighty male and two females from Lowell, twelve males from Chelsea, two from Woburn, and one each from Somerville, Everett and Stoneham. Of this number there were fifty-seven discharged—forty-five males and two females from Lowell, eight males from Chelsea, and one each from Somerville and Woburn; leaving the number remaining, December 31, 1879, to be forty-two—thirty-five from Lowell, four from Chelsea and one each from Stoneham, Somerville and Woburn. The average number of inmates for the year was thirty-six.

The commitments to the institution were as follows: Fourteen for being habitual truants, seven for truancy, seventeen for larceny, twelve for wandering about the streets, five for stubbornness, two for breaking and entering, three for willful trespass and one for malicious mischief.

The ages of those committed were as follows: One was seven years of age, five were nine, seven were ten, eight were eleven, ten were twelve, nine were thirteen, fifteen were fourteen, four were fifteen and one was seventeen. The average age of those committed was twelve years and three months. The average sentence of those committed was nine months and seventeen days, and the average sentence served of those discharged was seven months and ten days. The longest sentence was two years and the shortest one three months. Of those committed one was born in England, one in Canada, five in Ireland, and fifty-four in America. Of the number discharged twenty-seven were pardoned; twenty-three from Lowell and four from Chelsea. And here I would say that when the pardoning power is used, after a careful investigation of the merits of the boy or person to be pardoned and he is one that by his exemplary course of conduct in the institution is every way deserving of the reward, it has not only on the boy himself a good effect, but has the most salutary effect on those remaining in the school, but when otherwise it produces an entirely opposite effect.

Religious services are held every Sabbath afternoon, at two o'clock, by the chaplain; and occasionally Mass is held by Reverend Michael O'Brien, or some of his assistants of the Catholic persuasion, and all that desire can attend one or the other services.

EXPENDITURES.

The average number of inmates supported in the almshouse, being one hundred and twenty-seven, in the

workhouse sixteen, and in the house of employment for juvenile offenders thirty-six, makes the whole average number supported at the institutions at the city farm to be one hundred and seventy-nine. This number also includes an average number of fifteen whose board was paid either in the almshouse or house of reformation.

The amount of bills paid for all expenses at the institutions at the city farm, was twenty thousand and thirty-seven dollars and twenty-three cents (\$20,037.23.) From this amount I deduct the following items: Five thousand nine hundred and sixty-two dollars (\$5,962.00), the value of two thousand nine hundred and eighteen (2,918) provision orders delivered as per order of the Secretary of the Overseers of the Poor; eighty-six dollars and forty cents (\$86.40), the cost of paper and bags used in the putting up of the orders, five hundred and eighty dollars and twenty cents (\$580.20), the cost of delivering the same; two thousand three hundred and ninety dollars and three cents (\$2,390.03), the amount received from the sales of produce from the farm; and one thousand seven hundred and ninety-five dollars and twenty-six cents (\$1,795.26), the amount received from the board of those not belonging to the city to support, leaving the actual cost of support to be nine thousand two hundred and twenty-three dollars and fourteen cents (\$9,223.14.) Dividing this sum by the actual average number belonging to the city to support which is one hundred and sixty-four (164), gives us an average yearly cost of fifty-six dollars and seventeen and three-fourths cents ($\$56.17\frac{3}{4}$) each, or one dollar and eight and one-third cents ($\$1.08\frac{1}{3}$) each per week in the various institutions. This amount includes the cost of all repairs

done during the year, as well as the salaries of the officers employed in and about the institutions.

The cost of the whole amount of repairs done, was one thousand eight hundred and eighty-seven dollars and seventeen cents (\$1,887.17); and also the cost of lodging and furnishing supper and breakfast to six hundred and thirty tramps that were put up during the year.

CONCLUSION.

In the conclusion of my official labors for the year and the rendering of an account of the various institutions under my charge it gives me great pleasure to say that you have, one and all, shown me great kindness in your liberality in furnishing me with all that is necessary to care and provide for the wants of the unfortunate people in the different institutions, and also in granting all the desires that I may have expressed in regard to the various improvements made during the year, for which allow me here to express my thanks to you, one and all, as members of the Board of Overseers of the Poor to whom this report is most

Respectfully submitted,

LORENZO PHELPS,

Superintendent of Institutions at City Farm.

SCHEDULE OF PERSONAL PROPERTY

*Under the charge of Lorenzo Phelps, Superintendent of
Institutions at City Farm, December 31, 1879.*

| | |
|--|----------|
| 1 span horses, \$100 ; 1 pair matched horses \$150..... | \$250 00 |
| 1 black horse, \$50 ; 1 roan horse, \$75..... | 125 00 |
| 6 cows, \$300 ; 14 shoats, \$140. | 440 00 |
| 40 fowls \$20 ; 1 carry-all, \$100..... | 120 00 |
| 1 double sleigh, \$70 ; 1 traverse-runner sleigh, \$50..... | 120 00 |
| 2 two-horse farm wagons, 175 ; 1 one-horse wagon, \$40..... | 215 00 |
| 2 two-horse dump carts, \$225 ; 1 night-soil cart, \$25..... | 250 00 |
| 2 traverse-runner sleds, \$100 ; 1 single sled, \$15..... | 115 00 |
| 1 steer sled, \$1 ; 3 sets sideboards for sleds, \$22.50..... | 23 50 |
| 1 market wagon, \$40 ; 2 express wagons, \$125..... | 165 00 |
| 12 wheelbarrows, \$30 ; 5 ladders, \$10..... | 40 00 |
| 125 posts, \$20 ; chests, hogsheads, etc., \$25..... | 45 00 |
| 2 single carriage harnesses, \$50 ; 1 cart harness, \$5..... | 55 00 |
| 2 single harnesses, \$20 ; 2 pair double harnesses, \$35..... | 55 00 |
| A lot of pieces of harnesses, collars, reins, etc..... | 10 00 |
| 4 robes, \$8 ; horse blankets, etc., \$9..... | 17 00 |
| 1 hay cutter, \$5 ; 1 farmer's boiler, \$30..... | 35 00 |
| 24 tons English hay, first quality, at \$18..... | 432 00 |
| 6 tons English hay, second quality, at \$15..... | 90 00 |
| 18 tons meadow hay, \$180 ; 3 tons rowen, \$45..... | 225 00 |
| 500 lbs. meal, \$6.50 ; 1000 lbs. fine feed, \$13..... | 19 50 |
| Measures, etc., \$2.50 ; 64 casks, \$64 ; 1000 lbs. carrots, \$6..... | 72 50 |
| 1,400 galls. vinegar, \$175 ; 50 bushels turnips, \$10..... | 185 00 |
| 6 bu. beets, \$1.80 ; 15 bu. scullions, \$6 ; 125 bu. su. beets, \$31.25 | 39 05 |
| Barrels, \$1.75 ; 40 bu. salt, \$10 ; snaths and scythes, \$8..... | 19 75 |
| 2 mowing machines, \$65 ; 200 heads cabbages, \$10..... | 75 00 |
| Lime and barrels, \$10 ; 70 hot bed sashes, \$100..... | 110 00 |

| | |
|-----------------------------|------------|
| <i>Carried forward.....</i> | \$3,348 30 |
|-----------------------------|------------|

SCHEDULE OF PERSONAL PROPERTY.

29

| | |
|--|------------|
| <i>Brought forward</i> | \$3,348 30 |
| Old sashes, \$10 ; matting, \$5 ; wheelbarrow, \$3..... | 18 00 |
| Miscellaneous articles, \$6 ; 2 grain cradles, \$2..... | 8 00 |
| 5 copper pumps and lead pipe, \$20 ; bean sifter, \$5..... | 25 00 |
| Bag filler, \$1 ; night jet, \$1 ; 2 ropes and falls, \$25..... | 27 00 |
| 48 coffins, \$96 ; 20 camp beds, \$20 ; 80 boxes, \$10..... | 126 00 |
| Nails, axe handles, etc., \$11.25 ; 6 plows, \$60..... | 77 25 |
| 2 cultivators, \$10 ; 2 harrows, \$15 ; 1 cultivator harrow, \$7.50 | 32 50 |
| 2 step ladders, \$6 ; 2 jacks, \$5 ; 8 ox chains, \$8..... | 19 00 |
| 1 winnowing mill, \$5 ; 12 stake chains, \$9..... | 14 00 |
| 12 shovels, \$12 ; 6 dung forks, \$10 ; 12 hoes, \$6..... | 28 00 |
| 4 iron rakes, \$2 ; 5 picks, \$5 ; 5 bars, \$10..... | 17 00 |
| 2 sledges, \$3 ; 3 wedges, \$2.25 ; 16 rakes, \$2 ; 3 bog hoes, \$2.25 | 9 50 |
| 18 hay forks, \$14.40 ; 1 seed sower, \$5 ; 2 garden lines, \$3..... | 22 40 |
| 4 wrenches, \$4 ; 6 sickles, \$3 ; 4 ropes, \$2 ; 12 trowels, \$6..... | 15 00 |
| 4 saw horses, \$2 ; 5 axes, \$5 ; 2 sets whiffletrees, etc., \$10..... | 17 00 |
| 1 horse hoe, \$5 ; 425 galls. vinegar, \$63.75 ; casks, etc., \$19... | 87 75 |
| 550 bushels potatoes, \$330 ; squash, etc., \$5..... | 335 00 |
| 125 cords wood, \$750 ; 80 tons coal, \$480..... | 1,230 00 |
| 1 hand engine, hose, leather and rubber, etc..... | 211 00 |
| Stock, tools, etc., in carpenter shop..... | 104 25 |
| Stock, tools, etc., in paint shop..... | 112 50 |
| Stock, tools, etc., in blacksmith shop..... | 100 00 |
| Stock, tools, etc., in shoe shop..... | 96 88 |
| Stock of provisions, etc., in store room..... | 1,487 95 |
| Beds, bedding, furniture, clothing, crockery, etc., in house . | 6,188 41 |
| Beds, bedding, furniture, crockery, etc., in pest-house. | 300 00 |

\$14,057 69

REPORT OF TEACHER AND CHAPLAIN.

To the Board of Directors of the House of Employment and Reformation for Juvenile Offenders in the City of Lowell:

GENTLEMEN, — It gives me much pleasure as Teacher and Chaplain of Institutions at the City Farm to present to your honorable body my fourth annual report. In doing so I wish, first of all, to acknowledge the dear loving hand of our Heavenly Father that has led us safely and prosperously through another year.

The classification of the school may be found in the following tables.

Morning lessons, reading of Scripture and our Lord's Prayer.

IN ARITHMETIC.

| | | | | | | |
|------------|--------------|-------------|---------------|--------------|---|----|
| Bradbury's | Eaton's | Practical | Arithmetic, | first class | . | 5 |
| " | " | " | " | second class | | 8 |
| Colburn's | Intellectual | Arithmetic, | first class | . | . | 9 |
| " | " | " | second class | . | | 8 |
| " | " | " | third class | . | . | 10 |
| " | " | " | fourth class. | . | | 15 |
| Walton's | Primary | Arithmetic, | two classes | . | . | 19 |

IN SPELLING.

| | |
|--|----|
| Worcester's New Pronouncing Spelling Book, first class | 13 |
| “ “ “ “ “ second class | 15 |
| Hillard's Third Reader, spelling and defining . | 10 |
| Franklin “ “ “ “ . . . | 6 |
| “ Second “ “ “ . . . | 9 |
| “ Primer | 6 |

IN GEOGRAPHY.

| | |
|--|----|
| Guyot's New Intermediate, Mass. Edition, first class . | 9 |
| “ “ “ “ “ second class | 11 |
| “ Elementary for Primary classes . . . | 6 |

IN HISTORY.

| | |
|--|---|
| Anderson's History of the United States, first class . | 3 |
| “ “ “ “ “ second class | 6 |
| “ “ “ “ “ third class . | 3 |

IN READING.

| | |
|----------------------------------|----|
| Franklin Fifth Reader | 11 |
| “ Fourth “ | 9 |
| “ Third “ | 7 |
| “ Second “ | 10 |
| “ Primer, first class | 6 |
| “ “ second class | 4 |
| Hillard's Third Reader | 11 |
| “ Intermediate Reader | 6 |

IN WRITING.

| | |
|--|-----|
| Dunton's No. 6 | 3 |
| “ “ 4 | 3 |
| “ “ 3 | 6 |
| “ “ 2 | 7 |
| “ “ 1 | 18 |
| Have taught to write their name on slate . . . | 10 |
| Number in School January 1, 1879, | 63 |
| Boys committed during year 1879, | 58 |
| Pupils discharged during year 1879, | 47 |
| Number attending school, at the present time . | 65 |
| Average monthly attendance for the year. . . | 56 |
| The number instructed during the year . . . | 141 |

Pupils in the school under sentence, forty-three: males, forty-three.

Pupils in the school not under sentence, twenty: males, twelve; females, eight.

Were committed for the following offences:

| | |
|---|----|
| Wandering about the streets and trespass. . . . | 3 |
| Truancy | 32 |
| Assault and Battery | 6 |
| Breaking and Entering | 00 |
| Larceny | 14 |
| Stubbornness | 3 |

The year, I think, as a whole, has been one of fair success, both in school and out.

Feeling that many of my pupils would have but few advantages for education after leaving our school, I have made it a point to teach what would be most advantageous to them in their sphere of life.

Of the twenty-five years I have passed with juvenile offenders, I can truly say I have never had a more willing and obedient class of pupils. Very many of them are dear to me. May I not be allowed to say, I love them, and that many of them love me. As an evidence of this fact, not a punishment was inflicted upon a single pupil for the months of July, August and September.

Although my work might be repulsive to some, yet to me there is much in it that I enjoy. To educate and lift heavenward a human being, should have a charm for every professing christian; for so taught our dear Master in Heaven.

I have made as much sunshine for every man, woman and child as I possibly could during the year, knowing by experience if one desires to be happy in this world he must do all in his power to make those happy about him.

In all the years I have served the City of Lowell I have done what I could to lay a foundation whereon each pupil might build a character that would withstand the trials and temptations incident to every human being, thereby the better fitting them for the grave and responsible duties as citizens of our glorious Republic. If I have succeeded with ever so small a number, to the dear Lord be all the glory.

In closing this report allow me, if you please, Gentlemen of the Board, to extend to you all, and each of you, my hearty thanks for your kindness and sympathy.

WM. A. LANG,
Teacher and Chaplain.

DISPENSARY REPORT.

FREE DISPENSARY ROOMS,
LOWELL, January, 1880.

To the Overseers of the Poor:

GENTLEMEN — In compliance with a vote passed by the Board of Physicians of the Lowell Free Dispensary, on the 1st of December last I herewith present to you the following report:

Although the main object of this report will be to show what the dispensary has accomplished; how many patients have availed themselves of its advantages, and what has been done for them, still, inasmuch as this is the first annual report of this institution, it seems to be in place to preface the report with a cursory sketch of the history of its organization.

The ordinance establishing the Free Dispensary went into effect on the 10th of June last. A special meeting of the Middlesex North District Medical Society was at once held, and the names of twelve (12) members of the Society were presented to the Overseers of the Poor as candidates for Dispensary Physicians. The Overseers of the Poor ratified the nominations of the Medical Society. The physicians appointed are Drs. Allen, Bass, Colton, Fisk, Fox, Hoar, Huntress, Irish, Leighton, Parker, Pinkham and H. J. Smith.

On the 14th of July the Board organized, Dr. Allen being chosen Chairman and Dr. Huntress Secretary,

with the following Executive Committee: the Chairman of the Board and Drs. Bass, Fisk, Fox and Leighton.

At an adjourned meeting held on the 20th of August the following Rules, prepared by Drs. Smith, Hoar and Irish, were adopted by the Board.

RULES.

Name.—This organization shall be called the BOARD OF DISPENSARY PHYSICIANS.

Officers.—The officers shall be a Chairman, Vice-Chairman, Secretary and an Executive Committee of five, the Chairman of the Board to be the Chairman of the Executive Committee. These officers shall be elected by ballot on the first Monday in February, to hold office for one year.

Duties.—The Chairman, Vice-Chairman and Secretary shall perform the duties usually incumbent upon such officers. The Executive Committee shall superintend the purchase of drugs and instruments, have charge of the dispensary rooms, and exercise a supervision over the druggist's department, subject at all times to the orders of the Board of Physicians. The Drug Clerk shall open the dispensary one half hour previous to the hours of attendance of the Physicians; he shall keep the rooms clean, well aired and properly heated; he shall compound and dispense the medicines regularly prescribed, and preserve and record all prescriptions in a book kept for that purpose. He shall record in a suitable book an invoice of all articles purchased by order of the Board or the Executive Committee. He shall be present in the dispensary from 10 o'clock A.M. to 12.30 o'clock P.M., and from 4.30

o'clock to 5.30 o'clock P.M. each day of the week, except Sunday. On Sunday he shall be present from 12 o'clock M. to 1 o'clock P.M.

Meetings.—Regular meetings shall be held on the first Monday of February, April, June, August, October, and December. Special meetings shall be called by the Chairman at the request of three (3) members.

Attendance of Physicians.—At the annual meeting, held on the first Monday in February, the following *plan* for attendance of physicians shall be made: The Executive Committee shall divide the Board into two equal parts. One-half to attend the dispensary two months, beginning with February; the other half to attend the following two months, and so alternating during the year. The six physicians who have charge of the dispensary for any two months shall serve as follows: Two shall attend on Mondays and Thursdays, two on Tuesdays and Fridays, and two on Wednesdays and Saturdays; and the days assigned to each shall be mutually agreed upon. In case of failure to agree, the Executive Committee shall make such assignments.

Hours.—The dispensary shall be opened on each day of the week, except Sunday, from 10.30, A.M., to 12.30, P.M., for the attendance of physicians, during which hours the physicians for the day shall be present, either both during the whole time or each an hour, as they may agree. It shall also be opened each week-day from 4.30 o'clock to 5.30 o'clock, P.M., and on Sunday from 12 M. to 1, P.M., for distribution of medicine.

Each physician of the six in attendance may notify his colleagues to what particular classes of diseases he

would prefer to give especial attention, and so far as practicable they may refer such diseases to said physician's care.

Record Book.—A record book shall be provided for the use of the physicians, in which the following items shall be recorded: Name of patient, residence, age, male or female, date of admission, date of dismissal, disease, result, physician's name.

Patients.—In accordance with section 7 of the ordinance establishing this dispensary, each physician shall satisfy himself concerning the financial circumstances of every patient, and shall rigidly exclude from the benefits of the dispensary all who are able to pay for treatment.

Amendments.—Any rule may be amended by a majority vote of the whole Board.

Quorum.—Five members shall form a quorum.

The Board are at present governed by the above rules.

The Executive Committee of this Board, in conjunction with the Committee on Care and Repair of Buildings from your honorable Board, Messrs. Sanborn, Munn, and Cummiskey, attended to the selection and fitting up of the dispensary rooms and to the purchase of necessary drugs and instruments, and on the first of September the dispensary was opened to the public, Dr. David N. Patterson having been duly appointed Drug Clerk of the dispensary.

Inasmuch as the physicians have not all observed the same rule in entering the names of patients on the Register—some physicians entering the name of each patient only at the time of his first visit, and some at

every visit—it has presented to the Secretary some difficulty in procuring the requisite data of the work done here. And in a few instances the diagnosis has been omitted, a fact which will render the report somewhat imperfect.

The whole number of patients treated at the dispensary by the attending physicians from September 1st to January 1st is 322. Of these 322 cases the diagnosis has been given in 264 cases, and is as follows: .

| | | | |
|------------------------------|----|----------------------------------|----|
| Abscess, | 1 | Gonorrhœa, | 5 |
| Acne, | 1 | Heart, Disease of, | 3 |
| Alcoholism, | 1 | Hemorrhoids, | 1 |
| Amenorrhœa, | 3 | Hernia, | 1 |
| Anæmia, | 1 | Indigestion, | 10 |
| Aphtha, | 1 | Influenza, | 1 |
| Asthma, | 7 | Injury, | 14 |
| Bronchitis, | 35 | Iritis, | 3 |
| Cancer, | 1 | Laryngismus Stridulus, | 1 |
| Chancre, | 1 | Leucorrhœa, | 3 |
| Cholera Infantum, | 1 | Liver, Abscess of, | 1 |
| Chorea, | 1 | Liver, Congestion of, | 1 |
| Constipation, | 3 | Masturbation, | 1 |
| Conjunctivitis, | 5 | Menorrhagia, | 4 |
| Cornea, Ulcer of, | 2 | Nervousness, | 2 |
| Cystitis, | 3 | Neuralgia, | 6 |
| Debility, | 6 | Otorrhœa, | 4 |
| Dentition, | 2 | Orchitis, | 1 |
| Diarrhœa, Chronic, | 2 | Pannus, | 1 |
| Diphtheria, | 2 | Paralysis Agitans, | 1 |
| Dysentery, | 1 | Pericarditis, | 2 |
| Dyspepsia, | 9 | Pertussis, | 1 |
| Endocarditis, | 1 | Pharyngitis, | 2 |
| Epilepsy, | 1 | Phlebitis, | 1 |
| Erythema, | 1 | Phthisis, | 14 |
| Eczema, | 5 | Pleuritis, | 3 |
| Eyelid, Tumor of, | 1 | Prostate enlarged, | 1 |
| Gall stones, | 2 | | |

| | | | |
|------------------------|----|--------------------------------|----|
| Rheumatism, | 16 | Tooth extracted, | 5 |
| Scabies, | 1 | Tooth ulcerated, | 1 |
| Scrofula, | 15 | Ulcer, | 14 |
| Strangury, | 1 | Uterus, Disease of, | 4 |
| Syphilis, | 11 | Uterus, Prolapse of, | 1 |
| Tonsillitis, | 4 | Worms, | 1 |
| Toothache, | 1 | | |

The whole number of prescriptions compounded by the Drug Clerk, exclusive of those ordered by the city physician, was 880.

Number of prescriptions on order of city physician, 366.

Three hundred and thirty-two is given as the number of patients treated at the dispensary during the first four months. Most of these patients visited the dispensary more than once. So the total number of visits was much greater.

In regard to the cures effected, no reliable report can be made, and we can therefore give you only an idea of the *work* we have done, and not of the *good* we have accomplished. Next year we trust a more careful account of the results of treatment will be kept.

The two great dangers which attend every charitable work we, of course, have had to deal with: the danger on the one hand of being too generous and bestowing charity where it does not belong, and the danger on the other hand of being too strict and refusing aid to deserving applicants. The danger of being deceived has been encountered by so many charities that many people have been deterred from charitable undertakings through fear of having their charity misused. And this was naturally one of the arguments brought up against this

institution when the subject was first agitated; and we are obliged to admit that we have met with some trouble on that score. We are of the opinion that more care should be exercised in admitting patients. As at present arranged anybody can enter the dispensary, and it is for the attending physician to decide whether he shall receive treatment or not. The physician in attendance has not time to attend to this, nor should it be expected of him. In our opinion no one should be admitted to the dispensary until his financial circumstances have been examined into by some competent person as, *e. g.*, the Secretary of your Board or a practising physician of this city. Each patient should bring with him a certificate of such examination, and without this certificate no one should receive treatment.

In the Demilt Dispensary, in New York, the experiment is being tried of charging 10 cents for each prescription, and it seems to promise success. We do not feel competent as yet to recommend the adoption of that experiment here, but the cases would be few indeed when the patient could not obtain that small sum of money, and certainly no one would apply for medicine when it was not needed, if even this small charge were made. We shall note the result of the experiment in New York with interest.

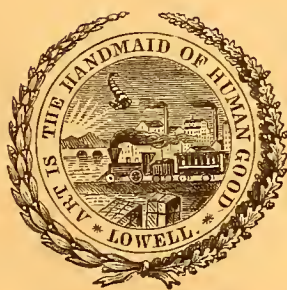
Another matter we would refer to your consideration. In our opinion here, as is the case in large cities generally, the dispensary should be the centre not only for the treatment of out-door patients, but for all the sick poor of the city. In Boston, for example, the sick poor at large depend for treatment almost entirely upon the dispensary physicians. There is in

Boston, but one main dispensary (the so called Boston Dispensary), supported by a fund left years ago (in 1796) and by private aid. To this are appointed nine (9) district physicians who attend the sick at their homes, receiving a salary of \$200 per year each. In New York the number of district physicians is very great, there being several for each ward in the city. In this city six district physicians—one for each ward—could attend to the wants of the sick poor at large, thus relieving the city physician of the bulk of his work. These physicians should be connected with the dispensary, which should be their headquarters and to which they should report every day. The expense to the city would be but little if at all increased by this change, for the district physicians would be willing and able to attend to their work for a minimum salary, and in our opinion the interests of the sick poor would in this way be best subserved.

The Board would extend their sincere thanks to the Committee on Care and Repair of Buildings of the Overseers of the Poor, Messrs. Sanborn, Munn and Cummiskey, for their promptness and courtesy in attending to the wants and suggestions of the different members of the Board.

LEONARD HUNTRESS, JR.,
Secretary.

ANNUAL REPORT
OF THE
Superintendent of Streets,
OF THE
CITY OF LOWELL,
FOR THE YEAR 1879.



LOWELL:
LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 27, 1880.

Read and sent down.

SAMUEL A. McPHETRES, City Clerk.

IN COMMON COUNCIL, January 27, 1880.

Received and read.

DAVID CHASE, Clerk.

REPORT.

To the Honorable City Council:

Gentlemen:—In compliance with the ordinance, I respectfully submit this my Annual Report, giving a general statement of the expenditures of the Department during the preceding year, and such other matters as seem of importance.

| | | |
|--------------------------------------|-------------|--------------|
| Balance undrawn January 1, 1879..... | \$ 3,786 75 | |
| Appropriated in 1879..... | 60,000 00 | |
| Transferred from other accounts..... | 17,500 00 | |
| Received from sundry persons..... | 22,116 57 | |
| | <hr/> | |
| Total..... | | \$103,403 32 |
| *Total expenditure for the year..... | | 103,291 65 |
| | | <hr/> |
| Balance January 1, 1880..... | | \$111 67 |
| | | <hr/> |

*From this deduct—

| | | |
|--|-------------|--|
| Amount received for sidewalks, fuel, labor, material, &c..... | \$22,116 57 | |
| Amount paid for land taken for laying out and widening streets..... | 3,074 92 | |
| | <hr/> | |
| | \$25,191 49 | |
| | <hr/> | |
| Making the expenditures for ordinary street purposes..... | \$78,100 16 | |
| | <hr/> | |

STREETS LAID OUT AND ACCEPTED.

Bartlett, from Alder street to land of H. H. Barnes.
Beech, from Sixth street to land of J. M. G. Parker.
Cambridge, from Chelmsford street to River Meadow Brook.
Canton, from Middlesex street to Princeton street.
Congress, from Gorham street to Thorndike street.
Daly, from Chelmsford street to Grand street.
Fourth Avenue, from Mount Grove street to Mount Hope street.
Hampshire, from Hildreth street to Bridge street.
Hastings, from Liberty street to Pine street.
Keene, from Gorham street to Chapel street.
Lombard, from Mount Vernon street to School street.
Main, from Plain street to Canada street.
Mead, from Whipple street to Floyd street.
Maple, from Gorham street to West street.
Madison, from Burns street to Thorndike street.
Nineteenth, from Conant street to the County Road.
Prospect, from Kidder street to the Whipple land.

STREETS BUILT TO GRADE.

Agawam, widened from Lawrence street to Moore street.
Bartlett, partially built.
Congress, “ “
Fourth Avenue, from Mount Grove street to Mount Hope street.
Grand, from Hale street to Daly street.
Hampshire, from Hildreth street to Bridge street.
Kinsman, from Crosby street to Chambers street.
Lawson, from Queen street to School street.
Mount Grove, from Fourth Avenue to Seventh Avenue.
Manchester, from Gorham street to Quebee street.
Madison, from Burns street to Thorndike street.
Prospect, from Kidder street to Shepard's land.
Pollard, from Chapel street to Linden street.
Smith, from Powell street to Liberty street.
Third Avenue, from Mammoth street to Mount Grove street.
Tanner, from Plain street to Lincoln street.
Wilder, from Westford street to Pine street.
Westford, from Walker street to Porter street.

STREETS REPAIRED.

Appleton, from Garnet street to Favor street.
Andover, from Nesmith street to H. B. Shattuck's.
Adams, from Suffolk street to Broadway.
Bridge, at the Willows.
Coburn, from River street to the Brook.
Cedar, from Gorham street to Chapel street.
Cabot, from Moody street to the Canal.
Chapel, from Walnut street to Central street.
Central, from Crosby street to Walnut street.
Durant, near the premises of Charles Callahan.
Fletcher, from Broadway to Lagrange street.
First, from Bridge street to Read street.
Fifth, from Read street to Myrtle street.
Fulton, from River street to West Sixth street.
Garnet, from Middlesex street to Appleton street.
Hale, from Cambridge street to Chelmsford street.
Hanover, from Moody street to Merrimack street.
High, from Oak street to Andover street.
High, from East Merrimack street to Chestnut street.
Highland, from Thorndike street to South street.
London, partially graded.
Lane, near Liberty.
Lincoln, from Chelmsford street to the Brook.
Myrtle, from Sixth street to Tenth street.
Marion, from Broadway to Cross street.
Moody, from Suffolk street to Cabot street.
Merrimack, from Deatur street to James street.
Mammoth, from Wilson's to the City Line.
Read, from Second street to First street.
Somerset, from School street to Queen street.
Stevens, from Pine street to Parker street.
South, from Summer street to Union street.
Seventh, from Bridge street to Methuen street.
Third, from Bridge street to Myrtle street.
Thorndike, from Davis' Corner to Hale street.
Tilden, from Moody street to the Mall.
Walker, from Broadway to the N. & L. R. R.
West Fourth, near Albion street.

MACADAMIZING.

Streets have been macadamized as follows :

Pawtucket, from Black Brook to the residence of David Whitney.

Hale, from the Boston and Lowell Railroad to Thorndike street.

Howard, from the Brook to Tanner street.

Middlesex, from the house of Francis Jewett to the foot of the hill.

Suffolk, from Broadway to Market street.

BRIDGES.

The wooden paving on Central Bridge, which had become badly worn, has been replaced with concrete.

New sidewalks have been built on bridges in Market, Moody and Merrimack streets.

Lawrence-street Bridge has been repaired. It will have to be almost entirely rebuilt the present year.

SIDEWALKS.

Sidewalks of edgestone and concrete have been laid in the following-named streets :

Agawam, on the easterly side, opposite School House.

Abbott, on both sides, from Central street to Lawrence street.

Chapel, on the easterly side, from Charles street to Union street.

Cross, on the southerly side, from Suffolk street to Marion street.

Cushing, on the northerly side, continued to land of J. G. Peabody.

Carlton, Marshall and Gates, on Westerly side, from Middlesex street to Westford street.

Grand, on the westerly side, from Middlesex street to Marshall street.

Grove, on the northerly side, from Loring street to Wilder street.

Little, on the northerly side, from Dummer street to Lewis street.

Linden, on the southerly side, from Chapel street 100 feet westerly.

Moody, on the westerly side, from Dr. Kimball's to Pawtucket street.

Spalding, on the westerly side, from Moody street to Merrimack street. On the easterly side, from Coburn's to Moody street.

Wilder, on the easterly side, from Middlesex street to Westford street.

Union, on the southerly side, from Linden street to Chapel street.

Edgestone only has been set on the following-named streets :

Cedar, on both sides, from Keene street to Central street.

Gorham, on the westerly side, from Davis' Corner to the Engine House.

Hampshire, on the easterly side, opposite Shedd's land.

Hale, on the southerly side, opposite Kimball's land.

Myrtle, on the easterly side, from Sixth street to Tenth street. On the westerly side, from Mrs. Prescott's land to Tenth street.

Sixth, on the northerly side, from Beech street to Fremont street.

School, on the westerly side, from Westford street to Grove street.

Westford, on the northerly side, from Walker street to Porter street. On the southerly side, from School street to Porter street.

Westford, on the southerly side, opposite Denton's land.

Concrete only has been laid on the following-named streets, edgestone having been previously set :

Agawam, on the westerly side, from Lawrence street to Griffin street.

Gorham, on the southerly side, from Court street to Union street.

School street, on the westerly side, near Pawtucket street.

Concrete without edgestone was laid on the northerly side of Cross street, opposite the North Common.

The total amount of edgestone set during the year is fourteen thousand and forty-eight and nine-tenths (14,048 9-10) feet. The total amount of concrete laid during the year is seven thousand five hundred and sixty-nine and one-tenth (7,569 1-10) square yards.

STONE CROSSINGS.

Forty-nine granite crossings have been laid on the following-named streets :

| | | |
|------------|-----------|-----------|
| Andover, | Central, | Gorham, |
| Bridge, | Dummer, | Gates, |
| Broadway, | Fletcher, | Lawrence, |
| Branch, | Grove, | Moody, |
| Merrimack, | Suffolk, | Varney, |
| Market, | Third, | Westford, |
| River, | Union, | Wilder. |

PAVING.

The following shows the amount of paving laid during the year :

| STREET. | BETWEEN WHAT STREETS. | SQ. YDS. |
|--------------------------------------|---|-------------|
| Branch | Middlesex and westerly side of Queen..... | 2,735 7-10 |
| *Bridge..... | Central Bridge and Canal Bridge..... | 894 |
| †East Merrimack, (Southerly side) | Concord River and Fayette..... | 1,471 2-10 |
| *East Merrimack, | High and Alder..... | 2,472 |
| Gorham..... | Davis' Corner and Engine House..... | 4,370 9-10 |
| Liberty Square... | ..... | 51 8-10 |
| Market..... | Dutton and Westerly side of Dammer..... | 2 175 |
| River..... | Bridge and Coburn..... | 3,735 6-10 |
| Total..... | | 17,906 2-10 |

GUTTER PAVING.

Two thousand one hundred and thirty-five (2,135) square yards of cobble paving have been laid in the gutters of the following-named streets :

| | |
|-----------------|---------|
| East Merrimack, | School, |
| Fayette, | Tenth, |
| Mill, | Wilder. |

*Wood paving removed.

†Old stone paving removed.

PERSONAL PROPERTY.

The following is a schedule of the personal property in my care January 1st, 1880, belonging to the Appropriation for Roads and Bridges:

| | |
|------------------------------------|--------------------|
| 1 Engine..... | \$ 500 00 |
| Blacksmith Tools and Stock..... | 450 00 |
| 235 Cords Pine Wood..... | 1175 00 |
| 75 Tons Coal..... | 337 50 |
| 10 Tons Hay..... | 170 00 |
| 10 Tons Carrots..... | 130 00 |
| 2 Tons Straw..... | 32 00 |
| 100 Bushels Oats..... | 56 00 |
| 32 Bags Meal..... | 38 40 |
| 2 Rakes..... | 1 00 |
| 6 Street Rakes..... | 6 00 |
| 6 Forks | 6 00 |
| 36 Horses | 7250 00 |
| 14 Sets Double Harnesses..... | 550 00 |
| 11 Sets Single Harnesses..... | 330 00 |
| 5 Sets Lead Harnesses..... | 40 00 |
| 26 Feed Baskets..... | 13 00 |
| 38 Curry Combs and Brushes..... | 57 00 |
| 40 Collars..... | 80 00 |
| 40 Halters..... | 20 00 |
| 50 Blankets..... | 150 00 |
| 37 Surcingle..... | 16 50 |
| 1 Horse Sling..... | 15 00 |
| 7 Horse Covers..... | 35 00 |
| 2 Buffalo Robes..... | 18 00 |
| 1 Boiler | 3 00 |
| 14 Double Carts..... | 900 00 |
| 7 Single Carts..... | 420 00 |
| 1 Watering Cart..... | 110 00 |
| 5 Wood Wagons..... | 250 00 |
| 2 Pauper Wagons..... | 100 00 |
| 1 Lumber Wagon..... | 75 00 |
| 3 Single Wagons..... | 225 00 |
| <i>Amount carried forward.....</i> | <u>\$13,559 40</u> |

| | |
|--|--------------------|
| <i>Amount brought forward</i> | \$13,559 40 |
| 14 Double Wood Sleds..... | 700 00 |
| 2 Dump Sleds..... | 100 00 |
| 2 Single Sleighs..... | 80 00 |
| 3 Pauper Sleighs..... | 120 00 |
| 2 Stone Truck Drags..... | 150 00 |
| 14 Wheelbarrows..... | 42 00 |
| 5000 Feet Oak Plank..... | 175 00 |
| 500 Feet Pine Plank..... | 120 00 |
| 44 Shovels..... | 33 00 |
| 1 Stone Roller..... | 75 00 |
| 1 Grindstone..... | 3 00 |
| 1 Boring Machine..... | 5 00 |
| 3 Sand Screens..... | 15 00 |
| 5 Gravel Rakes..... | 5 00 |
| 2 Augers..... | 4 00 |
| 2 Anvils..... | 40 00 |
| 1 Street Sweeper..... | 300 00 |
| 1 Coal Screen..... | 7 00 |
| 764 Feet Edgestone..... | 183 36 |
| 38 Stone Bounds..... | 22 80 |
| 1 Copper Pump..... | 2 00 |
| 4 Stoves..... | 60 00 |
| 2 Saws and Saw Frames..... | 30 00 |
| 4 Hand Saws..... | 2 00 |
| 5 Wood Saws..... | 5 00 |
| 2 Saw Horses..... | 1 00 |
| 11 Tool Chests..... | 50 00 |
| 3 Dump Tubs..... | 15 00 |
| 2 Coal Hods..... | 1 50 |
| 1 Cart Body (New)..... | 15 00 |
| 1 Wagon Body (New)..... | 20 00 |
| 1200 Feet Oak Lumber prepared for Carts..... | 50 00 |
| 8000 Feet Spruce Plank..... | 144 00 |
| 4 Wood Baskets..... | 3 00 |
| 1 Cask Nails..... | 4 00 |
| 4 Spirit Levels..... | 4 00 |
| <i>Amount carried forward</i> | <u>\$16,146 06</u> |

| | |
|-------------------------------------|-------------|
| <i>Amount brought forward</i> | \$16,146 06 |
| 10 Steel Wedges..... | 8 00 |
| 7 Coal Baskets..... | 7 00 |
| 3 Coal Shovels..... | 2 25 |
| 9 Stone-Cutters' Points..... | 2 00 |
| 2 Trowels..... | 1 50 |
| 6 Paving Mauls..... | 30 00 |
| 1 Crosscut Saw..... | 4 00 |
| 3 Ladders..... | 13 00 |
| 1 Hand Cart..... | 5 00 |
| 44 Snow Shovels..... | 33 00 |
| 23 Hoes..... | 11 50 |
| 8 Corn Brooms..... | 2 00 |
| 7 Street Brooms..... | 3 50 |
| 18 Lanterns..... | 9 00 |
| 4 Oil Cans..... | 2 00 |
| 4 Pails..... | 1 00 |
| 37 Picks..... | 37 00 |
| 8 Striking Hammers..... | 16 00 |
| 11 Face Hammers..... | 27 50 |
| 5 Paving Hammers..... | 10 00 |
| 2 Hand Hammers..... | 2 00 |
| 5 Stone Hammers..... | 5 00 |
| 3 Brick Hammers..... | 1 50 |
| 400 lbs. Drills..... | 60 00 |
| 7 Plug Drills..... | 3 50 |
| 27 Crowbars..... | 54 00 |
| 3 Axes..... | 3 00 |
| 1 Adze..... | 1 00 |
| 1 Well Jack..... | 12 00 |
| 2 Jack Screws..... | 6 00 |
| 3 Plows..... | 12 00 |
| 1 Street Scraper..... | 7 00 |
| 2 Scythes..... | 3 00 |
| 110 Stake Chains..... | 55 00 |
| 12 Draught Chains..... | 45 00 |
| 121 Hammer Handles..... | 20 00 |
| 24 Pick Handles..... | 4 80 |
| <i>Amount carried forward</i> | \$16,666 11 |

| | |
|-------------------------------------|--------------------|
| <i>Amount brought forward</i> | \$16,666 11 |
| 100 Bundles Broom-stuff..... | 7 00 |
| 2 Stone Wheelbarrows..... | 10 00 |
| 1 Platform Scale | 8 00 |
| 1 Pair Draught Wheels..... | 75 00 |
| 2 Tubs..... | 1 50 |
| 4 Snow Scrapers..... | 20 00 |
| 1 Snow Plough..... | 20 00 |
| 2 Nail Hammers..... | 2 00 |
| 2 Long-handled Shovels..... | 2 00 |
| 3 Derrick Tubs..... | 30 00 |
| 2 Chairs..... | 3 00 |
| 1 Boom-Derrick and Rigging..... | 100 00 |
| 39 Bridge Stringers..... | 250 00 |
| 1 Writing Desk..... | 18 00 |
| 2 Powder Cans..... | 2 00 |
| 4 Tamping Bars..... | 4 00 |
| 1 Hay Cutter..... | 12 00 |
| 75 Feet wide Flagging..... | 19 75 |
| 269 Feet Capping Stone..... | 67 25 |
| 800 lbs. Mineral Salt..... | 24 00 |
| 239 Feet North River Flagging..... | 47 80 |
| Total..... | <u>\$17,389 41</u> |

SEWERS.

At the close of the season of 1878, eight hundred and fifty feet of the Marginal Sewer remained unfinished, comprising the most difficult part of the work. That portion in West Adams street was to be connected with that in Stephen P. Sargent's land westerly of Wilder street. The depth to be reached between these two points was from twenty-five to thirty-eight feet.

Two methods of construction through the deepest portion of the cut were proposed, one by means of an open cut, and the other by tunnelling. The former method was adopted, and the result proved the wisdom of the choice.

The excavation was begun the twelfth of March, and on the twenty-sixth of July the work had been completed in a very satisfactory manner, and without accident.

Work on other sewers has been continued throughout the season.

The following table shows the sewers built during the year, their length, size in inches, material, date when begun and when finished :

| STREET. | L'gth | Size | Material. | Begun. | Finished. |
|--------------------------|-------|----------------------|-------------------------------------|-----------|-----------|
| Andrews | 198 | 12 | Akron Pipe. | Sept. 9 | Sept 18. |
| Branch and Walker..... | 612 | 15 | Akron Pipe. | June 13. | July 3. |
| Beech. No. 1..... | 561 | 12 | Akron Pipe. | Aug. 2. | Aug. 12. |
| Beech. No. 2..... | 492 | 12 | Akron Pipe. | Oct. 1 | Oct 15 |
| Coburn..... | 429 | 40x26 30x20 30 | Brick and Iron Pipe. | June 2. | June 13. |
| Cross | 603 | 27x18 | Brick. | April 12. | May 17. |
| Centre | 187 | 12 | Akron Pipe. | Sept. 24. | Sept 27. |
| Dover..... | 607 | 12 | Akron Pipe. | May 1. | May 13. |
| Fairmount | 799 | 12 | Akron Pipe. | Sept 25. | Oct 9. |
| Grove | 272 | 12 | Akron Pipe. | July 5 | July 16. |
| Hildreth | 416 | 12 33x22 | Akron Pipe. Brick. | April 14. | May 1. |
| Hanover | 95 | 10 | Akron Pipe. | Aug 5. | Aug. 5. |
| High | 449 | 15 | Akron Pipe. | Oct. 24. | Nov. 5. |
| Jewett | 750 | 12 | Akron Pipe. | June 27 | July 16. |
| Kinsman | 169 | 12 | Akron Pipe. | Aug. 25. | Aug. 25. |
| Keene | 508 | 12 | Akron Pipe. | Aug. 13. | Aug. 25. |
| Lawrence and Agawam..... | 1502 | 27x18 12 24 | Brick. Akron Pipe. Iron Pipe. | May 20 | June 26. |
| Lawson..... | 241 | 10 | Akron Pipe. | May 23. | May 28. |
| Leroy..... | 277 | 12 | Akron Pipe. | July 2. | July 5. |
| Lawrence | 468 | 27x18 | Brick. | Aug. 26. | Sept. 10. |
| Marginal | 847 | 50x33½ | Brick. | March 12. | July 26. |
| Mill | 175 | 12 | Akron Pipe. | May 29. | June 7. |
| Moody..... | 248 | 12 | Akron Pipe. | July 16. | Aug. 4 |

| STREET. | L'gth | Size. | Material. | Begun. | Finished. |
|-------------------------------|-------|----------------------|-------------------------------------|-----------|-----------|
| Middlesex | 899 | 18 15 12 | Akron Pipe. | July 18. | Sept. 2. |
| Middlesex and Thorndike.... | 448 | 30x20 24x16 15 | Brick. Akron Pipe. | Sept. 3. | Sept. 23. |
| Nichols | 101 | 12 | Akron Pipe. | May 21. | May 27. |
| Prospect..... | 282 | 10 | Akron Pipe. | Aug. 1. | Aug. 9. |
| Pawtucket | 385 | 30x20 | Brick. | Oct. 13. | Oct. 31. |
| Porter..... | 393 | 12 | Akron Pipe. | Oct. 30. | Nov. 22. |
| Queen | 256 | 12 | Akron Pipe. | May 20. | May 28. |
| River | 197 | 12 | Akron Pipe. | Aug. 11. | Aug. 12. |
| Railroad..... | 313 | 12 | Akron Pipe. | Sept. 29. | Oct. 10. |
| Swift | 382 | 12 | Akron Pipe. | Jun. 9. | June 21. |
| Sixth | 909 | 15 | Akron Pipe. | July 17. | Aug. 1. |
| Somerset | 200 | 10 | Akron Pipe. | May 10. | May 13. |
| Thorndike and Congress..... | 275 | 21x14 15 24 | Brick. Akron Pipe. Iron Pipe. | May 13. | May 18. |
| Talbot | 323 | 12 | Akron Pipe. | June 23. | July 1. |
| Wyman..... | 233 | 12 | Akron Pipe. | May 20. | May 23. |
| Westford (near Coral).. | 309 | 12 | Akron Pipe. | April 4. | April 11. |
| Walker | 450 | 12 | Akron Pipe. | Sept. 6. | Sept. 28. |
| Westford (near Porter)..... | 333 | 33x22 27x18 | Brick. | Sept. 1. | Sept. 26. |

The total number of feet laid during the year is seventeen thousand five hundred and ninety-three (17593), which is equal to three and thirty-three hundredths (3 33-100) miles.

The following sewers have been laid out but have not yet been built :

| | |
|------------------------------|------------------------------------|
| Bowers and Fletcher streets, | Pawtucket and Wannalancit streets, |
| Mount Vernon street, | High and Bartlett streets. |
| Andrews street, | Westford street, |
| Robbins street. | |

The following is a schedule of the Personal Property in my care, January 1, 1880, belonging to the Appropriation for Sewers and Drains :

| | |
|------------------------------------|-----------------|
| 50 Shovels..... | 25 00 |
| 80 Picks..... | 80 00 |
| 18 Crowbars..... | 36 00 |
| 23 Striking Hammers..... | 46 00 |
| 12 Face Hammers..... | 36 00 |
| 20 Lanterns..... | 20 00 |
| 7 Oil Cans..... | 1 25 |
| 3 Forges..... | 75 00 |
| 2 Electric Batteries..... | 140 00 |
| 3 Shear Poles and Rigging..... | 120 00 |
| 3 Powder Cans..... | 3 00 |
| 4 Saws..... | 2 00 |
| 2 Hand Hammers..... | 2 25 |
| 7 Chains..... | 14 00 |
| 12 Tag Ropes..... | 12 00 |
| 7 Sheeting Mauls..... | 8 75 |
| 1,500 lbs. Steel Drills..... | 225 00 |
| 4 Spirit Levels..... | 4 00 |
| 3 Jack Screws..... | 20 00 |
| 4 Trowels..... | 2 25 |
| 6 Axes..... | 4 50 |
| 4 Hoes..... | 2 00 |
| 7 Hose-reducers..... | 3 50 |
| 200 Feet Rubber Hose..... | 20 00 |
| 10 Pails..... | 5 00 |
| 6 Wheelbarrows..... | 18 00 |
| 3 Anvils..... | 45 00 |
| <hr/> | |
| <i>Amount carried forward.....</i> | <i>\$970 50</i> |

| | |
|---|-------------------|
| <i>Amount brought forward</i> | \$970 50 |
| 4 Pumps..... | 32 00 |
| 1 Farmer Boiler..... | 20 00 |
| 15,000 Feet Lumber..... | 105 00 |
| 7 Tool Chests..... | 56 00 |
| 3 Blacksmith Sledges..... | 9 00 |
| 5 Cast Iron Mauls..... | 15 00 |
| 1 Hand Force Pump..... | 30 00 |
| 1 Cast Iron Pot..... | 2 00 |
| 3 Pairs Rubber Boots..... | 10 00 |
| 3 Galvanized Dippers..... | 9 00 |
| 3 Hydrant Valves..... | 6 00 |
| 13 Plug Drills..... | 2 60 |
| 6 Pairs Blacksmith's Tongs..... | 3 75 |
| 5 Rakes..... | 5 00 |
| 1 Tin Horn..... | 25 |
| 3 Galvanized Pails..... | 3 00 |
| 12 Sheeting Caps..... | 12 00 |
| 6 Grappling Irons..... | 5 00 |
| 3 Water Dippers..... | 30 |
| 1 Paving Hammer..... | 75 |
| 12 Concord Grates..... | 108 00 |
| 7 Catch Basin Traps..... | 56 00 |
| 2 Manhole Castings..... | 10 00 |
| 40 lbs. Steel Drills ($\frac{3}{4}$ inch)..... | 6 00 |
| 6 Sheeting Grapnels..... | 7 50 |
| 1 Vice..... | 3 50 |
| 9 Stone Cutters' Points..... | 1 80 |
| 3 Hand Hammers..... | 4 50 |
| 3 Steel Squares..... | 1 00 |
| 6 Dump Tubs..... | 60 00 |
| 3 Wrenches..... | 3 00 |
| Total..... | <u>\$1,558 45</u> |

Respectfully submitted.

JOHN C. WOODWARD.

ANNUAL REPORT

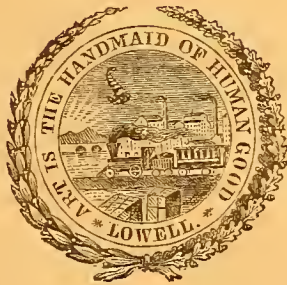
OF THE

Superintendent of Public Buildings,

OF THE

CITY OF LOWELL,

FOR THE YEAR 1879.



LOWELL, MASS.:
MARDEN & ROWELL, BOOK AND JOB PRINTERS.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 13, 1880.

Read and sent down.

SAMUEL A. McPHETRES, *City Clerk*.

IN COMMON COUNCIL, January 15, 1880.

Received and read.

DAVID CHASE, *Clerk*.

REPORT.

OFFICE OF SUPERINTENDENT OF PUBLIC BUILDINGS, }
January 1, 1880.

To the City Council of Lowell:

GENTLEMEN:—In compliance with an ordinance requiring the Superintendent of Public Buildings to report, annually, in the month of January, the condition of the buildings belonging to the City, and the expenditures thereon, I hereby submit the following Report:

PUBLIC BUILDINGS.

| | |
|---|-------------------|
| The amount credited for repairing public buildings for the year was . | \$8,850 02 |
| Expended | 6,953 33 |
| | <hr/> |
| Balance, January 1, 1880 | <u>\$1,896 69</u> |

EXPENDED AS FOLLOWS:

| | |
|---|------------|
| Sheathed Mayor's office and whitened the same, also put in new door, \$ | 99 50 |
| Repairs on the store formerly occupied by Mr. Gilman | 122 10 |
| Griffin & Lake, putting up rail in the Aldermen's room | 85 89 |
| Putting new doors in Messenger's and Council rooms. | 25 00 |
| L. Kittridge, laying drain pipe and cementing cellar floor | 25 32 |
| Lowell Felting Co., 1 roll felting | 13 92 |
| C. B. Coburn & Co., paint, oil, etc. | 29 50 |
| Repairing pipes and valves | 37 25 |
| Repairs on Government Building, for labor and materials | 589 27 |
| Money paid, from the Public Building Appropriation, on the new engine-house on Fourth street | 1,880 00 |
| Cost of bath-house, Belvidere | 1,300 00 |
| Whitney & Tibbetts, lumber | 115 08 |
| | <hr/> |
| Amount carried forward, | \$4,322 83 |

| | |
|--|------------|
| <i>Amount brought forward,</i> | \$4,322 83 |
| Howes & Burnham, lumber | 171 82 |
| Fisk & Spalding, paint, etc. | 74 17 |
| F. W. Proctor, repairing pipe | 72 16 |
| H. H. Wilder & Co., ventilator in Council room | 219 66 |
| T. R. Garity, plumbing | 116 86 |
| J. Kendall, paint, oil, etc. | 58 74 |
| M. C. Pratt & Co., lumber | 39 64 |
| J. Barris, blacksmithing | 13 94 |
| A. L. Brooks & Co., lumber | 90 39 |
| C. B. Coburn & Co., paint, brushes, etc. | 419 68 |
| Rogers, Taylor & Co., hardware | 58 10 |
| John Gilchrist, repairing pipe | 29 62 |
| Swett & Robbins, repairing wagon | 23 39 |
| W. J. Weir, making 6 ash cans | 27 00 |
| H. C. Church, paper | 5 70 |
| Geo. Wright, repairing pipe | 8 06 |
| J. A. Brabrook, new harness | 57 95 |
| Pevey Brothers, iron castings | 10 40 |
| D. M. Prescott, whitening | 9 25 |
| S. D. Butterworth, whitening Jackson hall and ante-rooms | 65 74 |
| H. B. Shattuck, hardware | 43 28 |
| Roads & Bridges, shoeing horses | 13 50 |
| T. Costello, piping | 17 05 |
| Benner Brothers | 6 06 |
| Adams & Co., bocking | 12 50 |
| Chas. E. Adams, hardware | 4 95 |
| Wm. Waugh, repairing roofs to Huntington and Jackson halls | 16 82 |
| To labor, making coffins, and also at Dispensary and City farm | 293 05 |
| Stock and labor, repairing and painting Market-house building | 151 09 |
| | <hr/> |
| | \$6,458 40 |

The balance of the expenditures was for ordinary repairs.

I would recommend the painting of all the outside woodwork to Huntington and Jackson halls.

SCHOOL-HOUSES.

| | |
|-----------------------------------|-------------|
| Amount credited for School-houses | \$23,603 51 |
| Expended | 17,608 74 |
| | <hr/> |
| Balance undrawn, January 1, 1880 | 5,994 77 |

EXPENDED AS FOLLOWS:

| | |
|---|-----------|
| Moving Charles street School-house, and building new cellar; also grading the lot and painting the house | \$ 416 73 |
| Alterations to Howard street School-house, and putting in new stairs, | 151 11 |
| Addition to the Cabot and Ford street School-house | 618 90 |
| Putting in new wall, and rebuilding fence, on West Sixth street | 141 81 |
| School-house lot on Agawam street—13,464 feet, at 15 cents | 2,019 60 |
| O. A. Simpson, building cellar, bank wall, and grading lot for a school-house on Agawam street | 362 00 |
| E. A. & A. T. Smith, concreting sidewalk and walks in the yard, and also in cellar of Agawam street School-house | 193 90 |
| L. Kittridge & Son, putting in drain pipe for Agawam street | 45 00 |
| B. G. Brown, for grading school-house lot | 52 00 |
| The balance was for labor and materials for the school-house | 3,370 37 |
| Brick addition to the Edson School-house—32x52 feet, and two stories high | 4,427 55 |
| E. A. & A. T. Smith, concreting cellar to Edson School-house | 72 50 |
| River street School-house, cost of moving and fitting up | 1,599 41 |
| Painting Green School-house | 8 33 |
| Grading Rock street school-yard | 13 00 |
| Painting and repairing Fayette street School-house | 119 20 |
| Repairs on Varnum School-house | 30 00 |
| Repairs on Kirk street School-house | 100 00 |
| Mann School-house—Teachers' desks | 36 00 |
| B. G. Brown, carting dirt—London street school-yard | 75 00 |
| School-house No. 7, Chapel street | 72 76 |
| Painting School-house No. 4, Chapel street | 102 00 |
| Painting new High street School-house | 138 44 |
| Painting Carter street School-house | 75 00 |
| Painting school-house, Pond street | 155 00 |
| Painting inside blinds and laying floors at Franklin School-house | 267 46 |
| Painting blinds to Race street School-house | 21 50 |
| Ames street, painted and repaired | 21 10 |
| Labor, making school furniture, also stock | 397 95 |
| Repairing chimneys | 60 00 |
| Lumber used on small jobs, 5,500 feet at 35 cents | 192 50 |

\$15,156 12

The balance was for repairs in general.

It will be necessary to relay a number of the floors in the different school-houses this season, and paint a number of the school-houses inside and out.

I would recommend, if there are to be any new houses built this year, that preparation should be made for the same early in the season, for they can be built at better advantage, and cheaper than if put off until summer.

I would also recommend raising the house in Pawtucketville, and putting a cellar under the same; also, that all of the school-house cellars not cemented or conereted should be cemented or con-creted this season.

ENGINE-HOUSES.

The Engine-houses have required considerable repairing and alterations the past season, and I see no good reason why there should be a great outlay this year.

EXPENDED AS FOLLOWS:

| | |
|---|--------------------|
| Alterations and repairs made on the Middle street engine-house the past season | \$4,502 58 |
| Addition to Hose No. 7, Cross street, and made other repairs . . . | 1,864 16 |
| Addition to Hose No. 8, Central street, moving back old house, and repairing the same | 2,125 30 |
| Sheathing and making alterations and repairs on Fayette street . . | 578 85 |
| C. P. Barclay, contract on new engine-house, Fourth street . . . | 8,500 00 |
| For extra work and materials | 113 65 |
| E. A. & A. F. Smith, concreting sidewalk and cellar | 260 05 |
| | <u>\$17,944 59</u> |

The amount paid out to those under my employ, and charged to the several appropriations, is as follows:—

| | |
|--|--------------------|
| To School-houses | \$4,371 25 |
| School Janitors | 7,457 70 |
| Schools | 905 14 |
| Repairs of Public Buildings | 2,674 79 |
| Fire Department | 2,168 17 |
| Support of Paupers | 293 05 |
| Police, as Firemen and Janitor of Police Court | 730 00 |
| Commons | 12 18 |
| Water Board | 118 62 |
| Health Account | 287 35 |
| Reserved Fund | 94 68 |
| | <u>\$19,113 20</u> |

PERSONAL PROPERTY OWNED BY THE CITY,

UNDER MY CHARGE, JANUARY 1, 1880.

| | |
|--|-----------------|
| 2500 feet of Canada boards | \$100 00 |
| 500 feet of cherry boards | 32 50 |
| 2000 feet of oak plank | 60 00 |
| 125 fence picks | 3 75 |
| 3000 feet of old lumber | 30 00 |
| 200 pounds of white lead | 18 00 |
| 15 gallons of spirits | 5 25 |
| 25 gallons of varnish | 37 50 |
| 15 gallons of oil | 10 50 |
| 3 old stoves. | 15 00 |
| 30 primary school desks | 30 00 |
| 124 grammar school desks | 136 40 |
| 18 boxes of glass | 72 00 |
| 95 desk irons | 50 25 |
| 213 pedestals | 106 00 |
| 16 old tables | 10 00 |
| 88 desk stands | 40 00 |
| 16 water pails | 2 40 |
| 25 brooms | 7 50 |
| 15 boxes of white crayons | 1 95 |
| 18 boxes of colored crayons | 16 20 |
| 41 settees, belonging to armories and ward rooms | 41 00 |
| 49 mats | 85 20 |
| 2 dusters | 4 00 |
| 1 mop handle | 25 |
| 9 floor brushes, large size | 18 00 |
| 8 floor brushes | 8 80 |
| 17 dust brushes | 5 13 |
| 7 waste baskets | 4 20 |
| 7 wash basins | 3 31 |
| <i>Amount carried forward,</i> | <u>\$955 09</u> |

| | |
|--|--------------------|
| <i>Amount brought forward,</i> | \$955 09 |
| 2 handle dippers | 75 |
| 2 gas fixtures | 2 00 |
| 48 ink wells | 1 44 |
| 7 dust pans | 2 10 |
| 4 registers | 6 00 |
| 50 grammar chairs | 30 00 |
| 20 chairs | 30 00 |
| 9 drinking dippers | 1 08 |
| 9 yards tapestry | 18 00 |
| 10 yards enameled cloth | 7 50 |
| 35 small chairs | 17 50 |
| 22 large coffins | 110 00 |
| 13 small coffins | 39 00 |
| 11 ladders | 33 00 |
| 2 teachers' desks | 50 00 |
| 100 school chairs in Ward 6 ward room (evening school) | 50 00 |
| 11 tables in Ward 6 ward room (evening school) | 16 50 |
| 70 chairs in Ward 3 ward room (evening school) | 35 00 |
| 16 tables in Ward 3 ward room (evening school) | 24 00 |
| 28 settees in ward rooms (evening school) belonging to public buildings | 28 00 |
| 360 chairs at Green (evening school) | 275 00 |
| 90 tables at Green (evening school) | 300 00 |
| 240 stools at Green (evening school) | 240 00 |
| 4 tables at Howard Mission (evening school) | 12 00 |
| 1 teachers' desk, Howard Mission (evening school) | 3 00 |
| 4 settees, Howard Mission (evening school) | 4 00 |
| 15 chairs, Howard Mission (evening school) | 7 50 |
| 400 feet of rubber hose at different schools | 48 00 |
| 3 dozen pairs of butts | 1 50 |
| 5 papers of brads | 60 |
| 17 gross of screws | 4 25 |
| 18 locks | 9 00 |
| 9 door sets | 6 75 |
| Furniture at the City Government building and Huntington and Jackson halls | 9,000 00 |
| Furniture in school-houses not included in real estate | 10,200 00 |
| Furniture in ward rooms | 150 00 |
| Furniture in armories and drill rooms | 550 00 |
| | <u>\$30,668 56</u> |

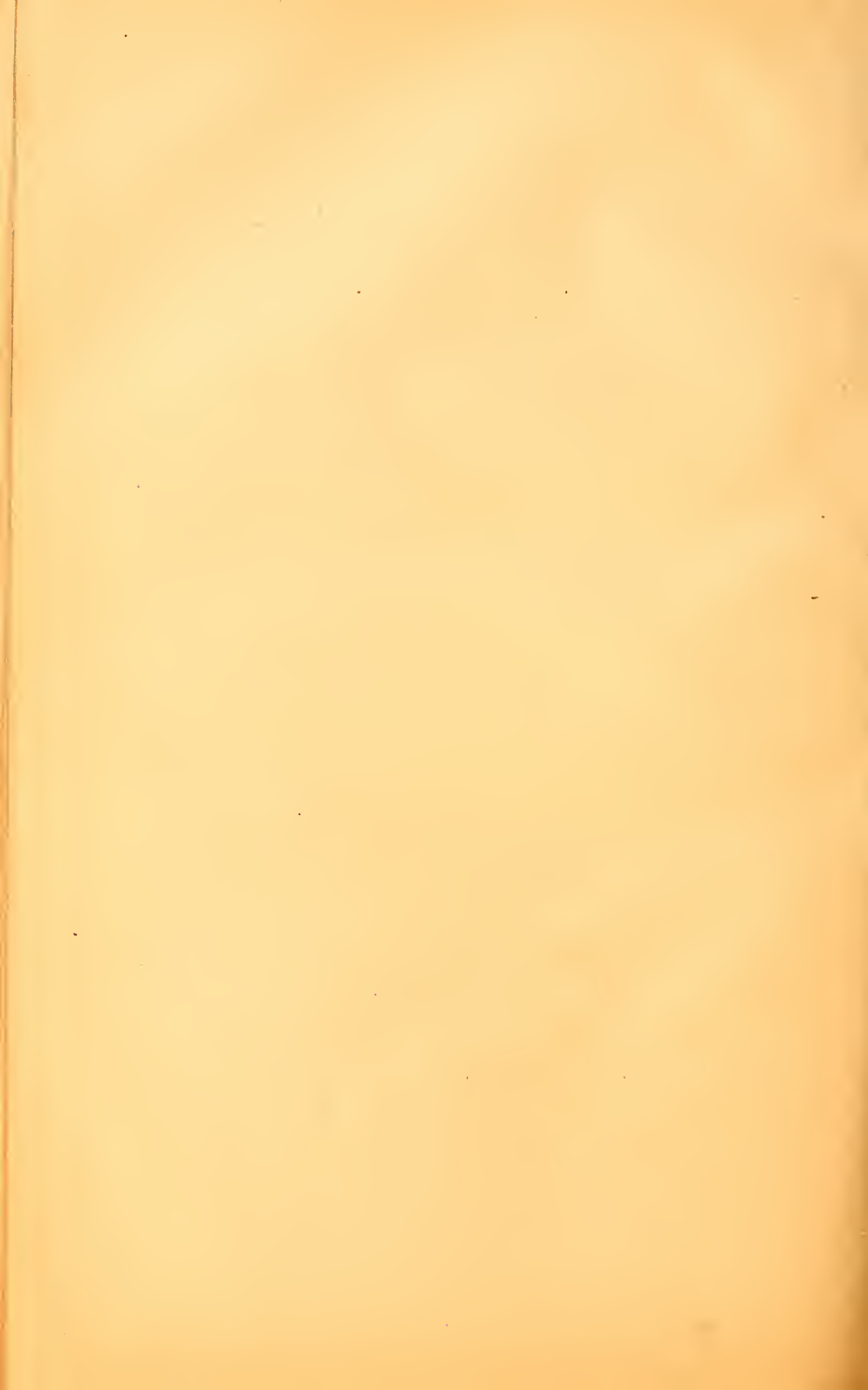
SUPERINTENDENT OF PUBLIC BUILDINGS.

9

SCHEDULE OF TOOLS BELONGING TO THE CITY, UNDER
MY CHARGE, JANUARY 1, 1880.

| | |
|--|----------|
| 2 picks | \$ 2 00 |
| 12 shovels | 8 00 |
| 9 wheelbarrows | 18 00 |
| 1 shingle ripper | 1 50 |
| 1 grindstone | 10 00 |
| 1 steelyard | 1 00 |
| 9 door sets and 2 floor sets | 18 00 |
| 2 augers | 2 50 |
| 6 pairs of steps | 9 00 |
| 6 wood saws | 5 00 |
| 4 hand screws | 3 00 |
| 3 pump hooks | 1 50 |
| 9 axes | 8 00 |
| 5 pairs of pipers' tongs | 13 00 |
| 4 mason jacks | 10 00 |
| 12 paint pots | 6 00 |
| 15 oil cans | 12 00 |
| 4 stone jugs | 2 00 |
| 12 paint brushes | 6 00 |
| 1 set of painters' rigging for stage | 40 00 |
| 2 sand boxes for painting | 1 00 |
| 1 patent sand blower | 5 00 |
| 1 horse | 200 00 |
| 1 wagon and harness | 100 00 |
| 1 double-runner sleigh | 190 00 |
| 2 blankets and 1 horse cover | 6 50 |
| 1 cast steel bell on Market House | 900 00 |
| 1 bell in High street church tower | 500 00 |
| 1 bell on Varnum School-house | 1,000 00 |
| 2 flagstaffs | 900 00 |

\$3,889 00



REAL ESTATE OWNED BY THE CITY.

| | |
|---|--------------|
| City Government building | \$30,000 00 |
| Huntington and Jackson Halls | 41,200 00 |
| Market-house | 56,000 00 |
| City Scales, rear of Market-house | 1,000 00 |
| Shed, back of Market-house | 150 00 |
| High school-house on Ann and Kirk streets | 43,000 00 |
| Bartlett school-house on Clark street | 13,000 00 |
| Edson school-house on Highland street | 17,400 00 |
| Colburn school-house on Lawrence street | 21,000 00 |
| Franklin school-house on Middlesex and Branch streets | 14,000 00 |
| Moody school-house on East Merrimack street | 12,000 00 |
| Green school-house on Merrimack street | 105,800 00 |
| Mann school-house on Lewis street | 13,500 00 |
| Varnum school-house on Myrtle street | 17,000 00 |
| Sherman school-house on Powell street | 7,000 00 |
| Primary school-house on Merrimack and Race streets | 3,400 00 |
| Primary school-house on Middlesex and Elliot streets | 6,000 00 |
| Primary school-house and ward room on Church street | 5,000 00 |
| Primary school-house on School street | 6,700 00 |
| Primary school-house on High street | 3,600 00 |
| Primary school-house on Paige street | 2,300 00 |
| Primary school-houses on Carter street | 7,500 00 |
| Primary school-house on Charles street | 2,500 00 |
| Primary school-house on Fayette street | 5,500 00 |
| Primary school-house on Rock street | 2,100 00 |
| Primary school-house on Cabot street | 3,250 00 |
| Primary school-house on West Sixth street | 10,038 00 |
| Primary school-house on River street | 5,500 00 |
| Primary school-house on Ames and Lawrence streets | 7,700 00 |
| Primary school-house on Dover street | 7,700 00 |
| <hr style="width: 20%; margin: 5px auto;"/> | |
| <i>Amount carried forward,</i> | \$470,838 00 |

| | |
|---|--------------|
| <i>Amount brought forward,</i> | \$470,838 00 |
| Primary school-house on London street | 3,255 00 |
| Primary school-house on Chapel street | 5,400 00 |
| Primary school-houses on Central and Chapel streets | 9,000 00 |
| Primary school-house on Howard street | 4,000 00 |
| Primary school-house on Worthen street | 26,000 00 |
| Primary school-house and ward room on Central street | 21,200 00 |
| Primary school-house on Common street | 34,000 00 |
| Primary school-house on High street | 15,000 00 |
| Primary school-house on Agawam street | 6,000 00 |
| Primary school-house on Varnum avenue | 500 00 |
| Primary school-house on Mammoth road | 3,000 00 |
| Primary school-house at Middlesex village | 3,000 00 |
| Hose carriage-house and ward room, Fayette street | 3,100 00 |
| Hook and ladder-house, ward room, carpenter's shop, and armory, Middle street | 21,000 00 |
| Double engine-house and stable on Middle street | 14,250 00 |
| Engine-house and stable, Gorham street | 13,200 00 |
| Engine-house, Ayer's city | 500 00 |
| Hose carriage-house, Fletcher and Cross streets | 3,500 00 |
| Hose carriage-house on Central street | 3,700 00 |
| Hose carriage and engine-house, Warren street | 1,800 00 |
| Alms-house and farm | 25,000 00 |
| House for Chaplain at City farm | 2,500 09 |
| Pest-house at City farm | 2,500 00 |
| Land and buildings on Kirk street | 16,000 00 |
| Land and buildings on Adams, Fletcher, Lagrange, and Cross streets, Public landing rear of Market House, exclusive of the landing set off by the Locks and Canals | 50,329 00 |
| Lot of land on Chelmsford street | 1,250 00 |
| Lot of land on First street | 1,600 00 |
| Lot of land on Fletcher and Whiting streets | 190 00 |
| Lot of land on Fletcher and Whiting streets | 1,133 00 |
| Lot of land on Middle street | 10,600 00 |
| Lot of land on Tenth street | 5,000 00 |
| North Common | 17,000 00 |
| South Common | 23,300 00 |
| New engine-house and stable on Branch street | 17,784 00 |
| New engine-house and stable on Fourth street | 11,468 00 |
| Mount Vernon Park | 2,000 00 |
| Belvidere Park | 2,300 00 |
| House and land on Wilder street | 5,100 00 |
| New three-story brick house at the Poor farm for aged people | 2,400 00 |
| | <hr/> |
| | \$859,697 00 |

WATER WORKS.

The real estate and personal property, belonging to the city, occupied
and used by the water works, net cost to Jan. 1, 1880 . \$1,790,828 50

LORENZO G. HOWE,

Superintendent of Public Buildings.

ANNUAL REPORT

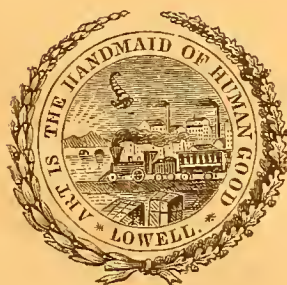
OF THE

Superintendent of Street Lamps,

OF THE

CITY OF LOWELL.

FOR THE YEAR 1879.



LOWELL:

LOWELL DAILY CITIZEN PRESS, CENTRAL STREET.

1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, January 27, 1880.

Received and Read.

SAMUEL A McPHETRES, City Clerk.

REPORT.

LOWELL, January 19, 1880.

The Mayor and Board of Aldermen :

Gentlemen :—Herein is submitted the annual report of the Superintendent of Street Lamps for the year ending December 31, 1879.

There have been added during the year 1879 forty-two gas and twenty-three fluid lamps, in all an addition of sixty-five, making 735 gas and 137 fluid lamps owned and maintained by the city of Lowell ; total, 872 lights.

Location of the gas lights added during the year 1879 is as follows : On High, Liberty, Moody, Pollard, Ames, Westford, Fifth, Dutton, Mammoth, Stevens, Andover, Thorndike, Whiting, River, Wyman, Chapel, Smith, Lawrence, Myrtle, Richmond avenue, Merrimack, Riverside, Broadway, Arlington. Middlesex streets, one on each. Shedd, Hale, Central, Coburn, Phillips streets, two on each. West Pine, three ; Mt. Grove, four. Total, 42.

The fluid lights added during the year 1879 are located as follows : On Lyons, Taylor, Fay, Court of Lawrence street, Coburn, Mill, Willie avenue, Keene, Swift, one on each. Gorham, five ; Hampshire, two ; Powell, three ; Chelmsford, two ; Grand, two. Total, 23.

EXPENSE OF SAID DEPARTMENT.

| | |
|--|--------------------|
| Gas for Street Lamps, 345,233 hours. .008 per hour, | |
| 755,827 hours, .0072 per hour. | 8,203 77 |
| Pay Rolls for Lighting and Care. | 3,680 95 |
| Gas for Public Buildings ... | 1,512 78 |
| Appropriation for Roads and Bridges, for Labor and Board for Horses. | 620 68 |
| C. E. Adams, Burners, Glass, Globes and Lamps. | 430 08 |
| Andrew J. Paul, for Gasoline. | 306 04 |
| Geo. S. Butters, Difference in Horse, and for use of one.. | 215 00 |
| P. B. Mead, for Horse. | 215 00 |
| H. H. Wilder & Co., Lanterns, Tin Cans, Repairing Lanterns. | 217 05 |
| S. & G. H. Converse, one Wagon. | 85 00 |
| C. B. Coburn & Co., Oil, Naphtha, Alcohol, Glass, Waste and Soap. | 217 81 |
| S. G. Maek, Lanterns, and Repairing old Lanterns | 138 48 |
| Cole & Nichols, Lamp-post Arms and Extensions. | 208 00 |
| Pevey Brothers, Lamp-post Arms and Extensions. | 156 88 |
| T. Cunningham & Sons, Pipe and Piping Tools. | 85 93 |
| Hayden Company, Lamp-post Cocks. | 31 20 |
| P. Dempsey, Alcohol. | 99 75 |
| French & Puffer, Burners, Founts, Wicking and Chimneys | 24 65 |
| Swett & Robbins, Repairing and Painting Wagon. | 14 35 |
| Hill Brothers, Repairing and Painting Wagons. | 17 58 |
| C. B. Relyea, Repairing Wagon. | 1 25 |
| T. M. Bolton, New Harness and Repairs . . . | 63 80 |
| Sawyer & Taylor, Repairing Harness. | 5 85 |
| S. L. Butman, Whips, Blankets and Repairs. | 27 05 |
| Fred. A. Bates, Pipe and Fittings. | 33 64 |
| R. F. Britton, Pipe Fittings and Matches. | 56 12 |
| H. Hosford & Co., Pair Horse Blankets. | 10 00 |
| <i>Amount carried forward.</i> | <u>\$16,678 69</u> |

STREET LAMPS.

5

| | |
|--|-------------|
| <i>Amount brought forward</i> | \$16,678 69 |
| James Barris, Lamp Frames. | 21 00 |
| T. R. Garity, Pipe and Labor..... | 10 41 |
| T. Costello & Co., Labor..... | 80 |
| A. W. Butcher, Bolt..... | 35 |
| A. L. Brooks & Co., Lumber..... | 25 |
| Davis & Sargent, Lumber..... | 7 73 |
| Griffin & Lake, Torch Handles..... | 3 80 |
| Howes & Burnham, Lumber..... | 21 45 |
| William Kelley, Door and Sash..... | 6 50 |
| Appleton National Bank, Difference in Lamp Post..... | 15 75 |
| Fisk & Spaulding, Painting and Glazing Lanterns..... | 84 96 |
| J. Kendall, Glass and Oil..... | 31 74 |
| E. Legro & Co., Matches..... | 4 44 |
| R. Simpson, Matches..... | 10 00 |
| J. L. Noyes & Son, Use of Horse..... | 11 00 |
| C. F. Blanchard, Horse Liniment..... | 1 00 |
| E. A. & A. T. Smith, Concrete..... | 4 50 |
| B. Johnson, Care of Lights..... | 3 50 |
| D. McCarty, Care of Lights..... | 1 50 |
| F. B. Coggeshall & Son, Paper & Books..... | 4 15 |
| Stone, Batcheller & Livingston, Printing..... | 3 50 |
| Boston & Maine R. R., for Freight..... | 1 35 |
| Boston & Lowell R. R., for Freight..... | 25 |
| Penniman's Express..... | 25 |
| Lovejoy & Co's Express..... | 1 25 |
| Geo. H. Wight, Repairing Lamp-post Cocks..... | 22 29 |
| Water Works, for Use of Water..... | 10 00 |
| Public Building, for Labor and Stock..... | 25 31 |
| Appropriation for Fire Department, for Teaming..... | 4 10 |
| H. B. Shattuck. Hardware..... | 85 |
| W. D. Harriman, Lamp Post Frame..... | 6 00 |
| Kelley & Alexandria, Gas Wrenches..... | 3 00 |

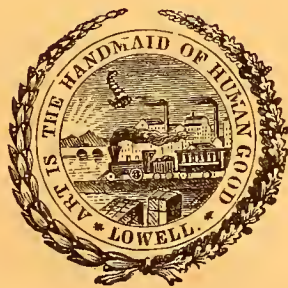
Total expense for 1879.....\$17,001 67

You will see by last year's report that our expenses have been less this year, while more lights have been added.

Respectfully Submitted,

RUEL F. BRITTON, *Superintendent.*

ANNUAL REPORT
OF THE
SUPERINTENDENT OF CITY SCALES,
AND
MEASURER OF WOOD AND BARK,
OF THE
CITY OF LOWELL FOR THE YEAR 1879.



LOWELL, MASS.:
Printed by Campbell & Hanscom, Morning Times, 22 Central Street.
1880.

CITY OF LOWELL.

IN BOARD OF ALDERMEN, JANUARY 13, 1880.

Read.

SAMUEL A. MCPHETRES, City Clerk.

REPORT.

To the City Council of the City of Lowell:

In compliance with the requirements of the ordinances, I have the honor to submit the following report for the year 1879. I have during the year weighed:

| 2389 Loads of Hay, | | weighing 2001 tons | | 1105 lbs. |
|--------------------|---|--------------------|---------|-----------|
| 441 | " | Straw, | " 285 " | 1415 " |
| 688 | " | Coal, | " 898 " | 1565 " |
| 152 | " | Iron, | " 142 " | 385 " |
| 56 | " | Cabbage, | " 95 " | 22 " |
| 14 | " | Waste, | " 22 " | 1855 " |
| 4 | " | Sheep pelts, | " 2 " | 1475 " |
| 7 | " | Scrap leather, | " 3 " | 1885 " |
| 14 | " | Corn, | " 10 " | 158 " |
| 3 | " | Ice, | " 6 " | 745 " |
| 22 | " | Bones, | " 14 " | 640 " |
| 7 | " | Paper stock, | " 9 " | 150 " |
| 51 | " | Carrots, | " 38 " | 185 " |
| 3 | " | Dye stuff, | " 2 " | 207 " |
| 4 | " | Beets, | " 3 " | 440 " |
| 2 | " | Squash, | " 2 " | 440 " |

| | | | |
|-------------------|----------|--------|----------|
| 2 Loads of Hides, | weighing | 1 tons | 1615 lbs |
| 12 “ Bagging, | “ | 5 “ | 1015 “ |
| 7 “ Shorts, | “ | 7 “ | 760 “ |
| 11 “ Pork, | “ | 24 “ | 1764 “ |
| 9 “ Hogs, | “ | 2 “ | 1578 “ |
| 1 Load Potatoes, | “ | 1 “ | 640 “ |
| 1 “ Stone, | “ | 4 “ | 505 “ |
| 1 “ Wood, | “ | | 1960 “ |
| 1 “ Hose pipe, | “ | | 515 “ |
| 1 Indigo case, | “ | | 83 “ |
| 351 Horses, | “ | 183 “ | 1837 “ |
| 19 Oxen, | “ | 14 “ | 515 “ |
| 10 Wagons, | “ | 5 “ | 1305 “ |

Received for weighing, \$789.39.

A. P. LAKE,

Supt. City Scales.

ANNUAL REPORT OF MEASURING.

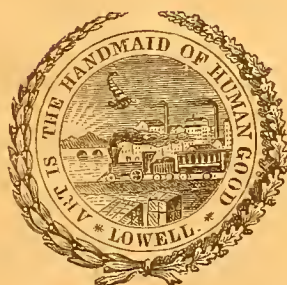
I have during the year measured:

| | | | |
|---------------------|-----------|------------|-----------|
| 6753 Loads of Wood, | measuring | 5550 cords | 4 1-2 ft. |
| 274 “ Manure, | “ | 172 “ | 3 1-4 “ |

A. P. LAKE,

Measurer.

ANNUAL REPORT
OF THE
SEALER OF WEIGHTS AND MEASURES
OF THE
CITY OF LOWELL,
FOR THE YEAR 1879.



LOWELL, MASS.:
MARDEN & ROWELL, BOOK AND JOB PRINTERS.
1880.

CITY OF LOWELL

IN BOARD OF ALDERMEN, January 2, 1880.

Received and read.

SAMUEL A. McPHETRES, *City Clerk*.

REPORT.

LOWELL, Dec. 31, 1879.

CITY SEALER'S OFFICE, 26 Gorham St.

To the Honorable the Mayor and Board of Aldermen:

I have inspected and sealed the following weights, measures, and scales, brought to this office, according to the provision of chapter 123, section 1, of the Acts of 1876, without any charge: 39 Platform Balances, 72 Counterbalance Scales, 40 Butcher and Spring Balances, 500 Weights, 236 Measures.

I have also inspected the following weights, measures, and scales, and received the following fees, which I have paid to the City Treasurer:

| | | |
|--------------------------------|------------|----------|
| 15 Hay and Coal Scales, | at \$1.00, | \$15.00 |
| 244 Platform Balances, | at .50, | 122.00 |
| 400 Counterbalance Scales, | at .03, | 12.00 |
| 200 Butcher and Spring Scales, | at .03, | 6.00 |
| 2340 Weights, | at .03, | 70.20 |
| 220 Measures, | at .03, | 6.60 |
| | | <hr/> |
| | | \$231.80 |

I have visited 449 places.

JAMES MURPHY,

City Sealer.

CITY DOCUMENT, 1880.

SALARIES

OF THE

Officers of the City of Lowell,

FOR THE

YEAR 1880.



LOWELL, MASS.:

MORNING MAIL BOOK AND JOB PRINTING OFFICE, 18 JACKSON ST.

1880.

CITY OF LOWELL.

In the Year Eighteen Hundred and Eighty.

RESOLUTION

ESTABLISHING THE SALARIES OF THE OFFICERS OF THE
CITY OF LOWELL FOR THE YEAR 1880.

*RESOLVED, by the Board of Aldermen and
Common Council of the City of Lowell,
in City Council assembled, as follows :*

The salaries of the several city officers for the year beginning on the first of April, one thousand eight hundred and eighty, shall be as herein mentioned; to be paid monthly, unless herein otherwise ordered.

SECTION 1. The salary of the MAYOR Mayor.
shall be at the rate of eighteen hundred
dollars per annum

SEC. 2. The salary of the CITY CLERK City Clerk.
shall be at the rate of fifteen hundred dol-
lars per annum.

City Treasurer.

SEC. 3. The salary of the CITY TREASURER shall be at the rate of twenty-five hundred dollars per annum for performing the duties of City Treasurer and Collector of Taxes. He shall annually give a bond in the sum of fifty thousand dollars, with good and sufficient sureties satisfactory to the Mayor and Aldermen, for the faithful performance of his duties, and to account for all sums of money received in the sales of Water Bonds and the collection of Water Rates, and in the capacity of City Treasurer and Collector of Taxes.

Auditor of Accounts.

SEC. 4. The salary of the AUDITOR OF ACCOUNTS shall be at the rate of thirteen hundred dollars per annum.

City Solicitor.

SEC. 5. The salary of the CITY SOLICITOR shall be at the rate of twelve hundred and fifty dollars per annum, which shall be in full for all services rendered the city.

Civil Engineer.

SEC. 6. The salary of the CIVIL ENGINEER shall be at the rate of twenty-one hundred dollars per annum, which shall be in full for services as Civil Engineer and

Engineer of the Water Board, and he shall devote his whole time to the service of the city. He shall be allowed such assistance as the chairman of the Joint Standing Committee on Streets, the chairman of the Standing Committee on Sewers and the president of the Lowell Water Board may determine.

SEC. 7. The salary of the CITY PHYSICIAN AND SUPERINTENDENT OF BURIALS shall be at the rate of seven hundred dollars per annum, which shall be in full for all services rendered the city.

City Physician
and Superin-
tendent of
Burials.

SEC. 8. The salary of the LIBRARIAN OF THE CITY LIBRARY shall be at the rate of one thousand dollars per annum.

Librarian of
the City
Library.

SEC. 9. The salary of the CLERK OF THE COMMON COUNCIL shall be at the rate of two hundred dollars per annum.

Clerk of the
Common Coun-
cil.

SEC. 10. The salary of the CITY MESSENGER shall be at the rate of nine hundred dollars per annum.

City Messen-
ger.

Measurer of
Wood and
Bark.

SEC. 11. The salary of the MEASURER OF WOOD AND BARK, in the rear of the Market House building, shall be at the rate of six hundred dollars per annum; and he shall account for all fees received by him in his official capacity, shall pay the same into the treasury monthly, and at the same time make a report of the amount so paid to the Auditor of Accounts; and also shall be required to devote ten hours daily to his duty during business hours. The salary of any additional measurers of wood and bark shall be at such a rate as the Mayor and Aldermen may from time to time determine, *provided*, that the same shall not exceed the amount of fees received.

President of
the Lowell
Water Board.

SEC. 12. The salary of the PRESIDENT OF THE LOWELL WATER BOARD shall be at the rate of three hundred dollars per annum.

SEC. 13. The Joint Committee on Accounts and the Joint Committee on Finance may provide such clerical assistance in the offices of the City Clerk, City Treasurer,

Auditor of Accounts, Assessors of Taxes and Committee on State Aid, as may be necessary, the expense thereof to be charged to Reserved Fund. Also, may provide such clerical assistance to the Librarian of the City Library as may be necessary, the expense thereof to be charged to the appropriation for Library.

POLICE.

SEC. 14. The salary of the CITY MAR- City Marshal
SHAL shall be at the rate of sixteen hundred dollars per annum; and he shall furnish a horse and carriage for the use of the Marshal and his deputy.

SEC. 15. The compensation of the DEP- Deputy Marshal and
UTY MARSHAL and CAPTAIN OF THE NIGHT Captain of the
WATCH shall be at the rate of three dollars Night Watch.
per day each.

The compensation of the SERGEANTS OF Sergeants of
POLICE shall be at the rate of two dollars Police.
and seventy-five cents per day, each.

Police Officers
and Watch-
men.

The compensation of all other POLICE OFFICERS AND WATCHMEN shall be at the rate of two dollars and fifty cents per day, each.

SEC. 16. All fees received by the officers mentioned in the two preceding sections, for attendance as witnesses, or for any other service in an official capacity, shall be paid by the officer receiving the same, to the City Treasurer, and said officer shall, at the same time, report to the Auditor of Accounts the amount thus paid: *Provided, however,* that said officers need not account for any fees for travel and attendance before the Supreme Judicial and Superior Courts, as witnesses.

The Standing
Justice of the
Police Court of
Lowell.

SEC. 17. THE STANDING JUSTICE OF THE POLICE COURT OF LOWELL shall be paid at the rate of one hundred dollars per annum, for receiving complaints, issuing warrants, and trying cases under the Forty-Second Chapter of the General Statutes, or any subsequent Act, or Ordinance concerning truant children and absentees from school.

SUPERINTENDENTS AND INSPECTORS.

SEC. 18. The salary of the SUPERIN-<sup>Superintend-
ent of Streets.</sup>TENDENT OF STREETS shall be at the rate of sixteen hundred dollars per annum. The city shall furnish a horse for his use.

SEC. 19. The salary of the SUPERIN-<sup>Superintend-
ent of Public
Buildings.</sup>TENDENT OF PUBLIC BUILDINGS shall be at the rate of thirteen hundred dollars per annum. The city shall furnish a horse and conveyance for the use of himself and the men under his charge.

SEC. 20. The salary of the SUPERIN-<sup>Superintend-
ent of the
Water Works.</sup>TENDENT OF THE WATER WORKS shall be at the rate of fourteen hundred dollars per annum, and he shall furnish a horse and carriage for his own use.

SEC. 21. The salary of the SUPERIN-<sup>Superintend-
ent of City
Scales.</sup>TENDENT OF CITY SCALES shall be at the rate of one hundred dollars per annum, and he shall pay into the City Treasury all moneys received for fees.

The salary of any additional weigher of hay and other articles shall be at such rate

as the Mayor and Aldermen may from time to time determine, provided that the same shall not exceed the amount of fees received.

Fish Warden.

SEC. 22. The salary of the FISH WARDEN shall be at the rate of forty dollars per annum.

Sealer of
Weights and
Measures.

SEC. 23. The salary of the SEALER OF WEIGHTS AND MEASURES shall be at the rate of four hundred dollars per annum, and all fees received by him shall be paid into the City Treasury monthly, and he shall, at the same time, report to the Auditor of Accounts the amount of such payment.

Secretary of
the Board of
Overseers of
the Poor.

SEC. 24. The salary of the SECRETARY OF THE BOARD OF OVERSEERS OF THE POOR shall be at the rate of eight hundred dollars per annum.

Chairman of
the Board of
Health.

SEC. 25. The salary of the CHAIRMAN OF THE BOARD OF HEALTH shall be at the rate of five hundred dollars per annum; and the salary of the other appointed member of the Board of Health shall be at the rate of two hundred dollars per annum.

ASSESSORS' DEPARTMENT.

SEC. 26. The salary of the CHAIRMAN Chairman of
the Board of
Assessors. OF THE BOARD OF ASSESSORS shall be nine hundred dollars per annum; and the salary of each of the other Assessors shall be eight hundred dollars per annum; and the said Assessors shall make out and distribute the tax bills. The Assessors shall devote their whole time, from March 1st to October 15th, to the service of the city, and shall engage in no other business or calling during that time. They shall jointly make a valuation of the real estate in the city, and enter the same in a book to be kept for mutual reference, the same to be done before entering upon a subdivision of their duties of assessing in May.

FIRE DEPARTMENT.

SEC. 27. The salaries of the several members of the Fire Department for the year beginning April first, one thousand eight hundred and eighty, shall be as herein mentioned, to be paid semi-annually unless otherwise ordered.

Chief Engineer.

The salary of the CHIEF ENGINEER shall be at the rate of twelve hundred dollars per annum, payable monthly, which shall be in full payment for all services which may be required of him by the City Council; and he shall devote his whole time to the duties of his office.

First Assistant Engineer.

The salary of the FIRST ASSISTANT ENGINEER shall be at the rate of one hundred and fifty dollars, and of the other Assistant Engineers at the rate of one hundred and twenty-five dollars each per annum.

The Secretary of the Board of Engineers.

The SECRETARY OF THE BOARD OF ENGINEERS, who shall be a member of the Board, shall receive twenty-five dollars additional, which shall be in full payment for all the services which may be required of him by the Mayor and Aldermen, the Chief Engineer and the Board of Engineers.

Foremen and Clerks.

The FOREMEN AND CLERKS of the respective Hose, Hook and Ladder and Steam Fire Engine Companies, shall be paid at

the rate of one hundred and ten dollars each per annum.

DRIVERS of Steamers, Hook and Lad- Drivers.
der and Horse Hose Carriages, who shall perform all the duties of Stewards, shall be paid two dollars per day, payable monthly.

ENGINEERS OF STEAM FIRE ENGINES shall Engineers of Steam Fire Engines. be paid at the rate of one hundred and seventy-five dollars per annum.

ASSISTANT ENGINEERS OF STEAM FIRE Assistant Engineers of Steam Fire Engines. ENGINES shall be paid at the rate of one hundred and twenty-five dollars per annum.

All other MEMBERS of Steam Fire En- Members.
gine, Hose and Hook and Ladder Companies, shall be paid at the rate of one hundred dollars per annum each, except members of the Volunteer Company at Pawtucketville, who shall be paid at the rate of twenty-five dollars per annum each.

SEC. 28. Whenever any person in the employment of the city shall demand pay-

ment of his salary, or any part thereof, it shall be the duty of the Auditor and City Treasurer to deduct therefrom any and all sums of money due from such officer to the city.

IN BOARD OF ALDERMEN, March 23, 1880.

Passed. JAMES C. ABBOTT, *Chairman*.

IN COMMON COUNCIL, March 23, 1880.

Passed. EARL A. THISSELL, *President*.

Approved, March 25, 1880.

FREDERIC T. GREENHALGE, *Mayor*.

A true copy. Attest:

SAMUEL A. McPHETRES, *City Clerk*.

